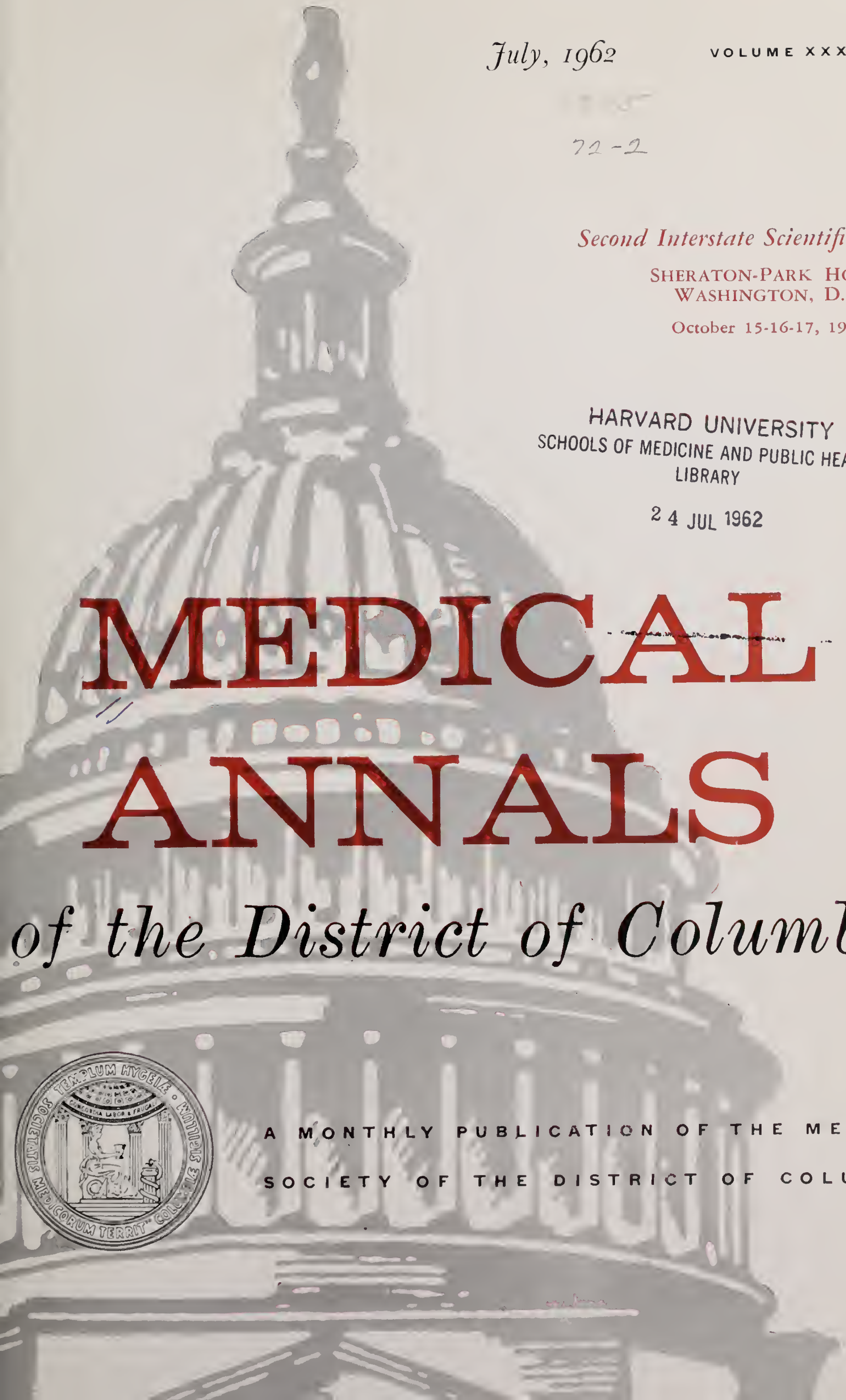
Harvard University
Library of
The Medical School
and
The School of Public Health
VE RI TAS

Digitized by the Internet Archive
in 2017 with funding from
The National Endowment for the Humanities and the Arcadia Fund

https://archive.org/details/medicalannalsof3119medi_0



July, 1962 VOLUME XXXI • NUMBER 7

72-2

Second Interstate Scientific Assembly

SHERATON-PARK HOTEL
WASHINGTON, D.C.

October 15-16-17, 1962

HARVARD UNIVERSITY
SCHOOLS OF MEDICINE AND PUBLIC HEALTH
LIBRARY

24 JUL 1962

MEDICAL ANNALS

of the District of Columbia

A MONTHLY PUBLICATION OF THE MEDICAL SOCIETY OF THE DISTRICT OF COLUMBIA

The incidence of postoperative wound infections, particularly among debilitated patients, presents a serious hospital problem.[1] These infections are caused in many cases by strains of staphylococci resistant to most antibiotics in common use.[1,2,3] In such instances, CHLOROMYCETIN should be considered, since "...the very great majority of the so-called resistant staphylococci are susceptible to its action."[4]

Staphylococcal resistance to CHLOROMYCETIN remains surprisingly infrequent, despite widespread use of the drug.[2,4,5-7] In one hospital, for example, even though consumption of CHLOROMYCETIN increased markedly since 1955, there was little change in the susceptibility of staphylococci to the drug.[7]

Characteristically wide in its antibacterial spectrum, CHLOROMYCETIN has also proved valuable in surgical infections caused by other pathogens—both gram-positive **and** gram-negative.[7,8]

CHLOROMYCETIN (chloramphenicol, Parke-Davis) is available in various forms, including Kapseals® of 250 mg., in bottles of 16 and 100.

See package insert for details of administration and dosage.

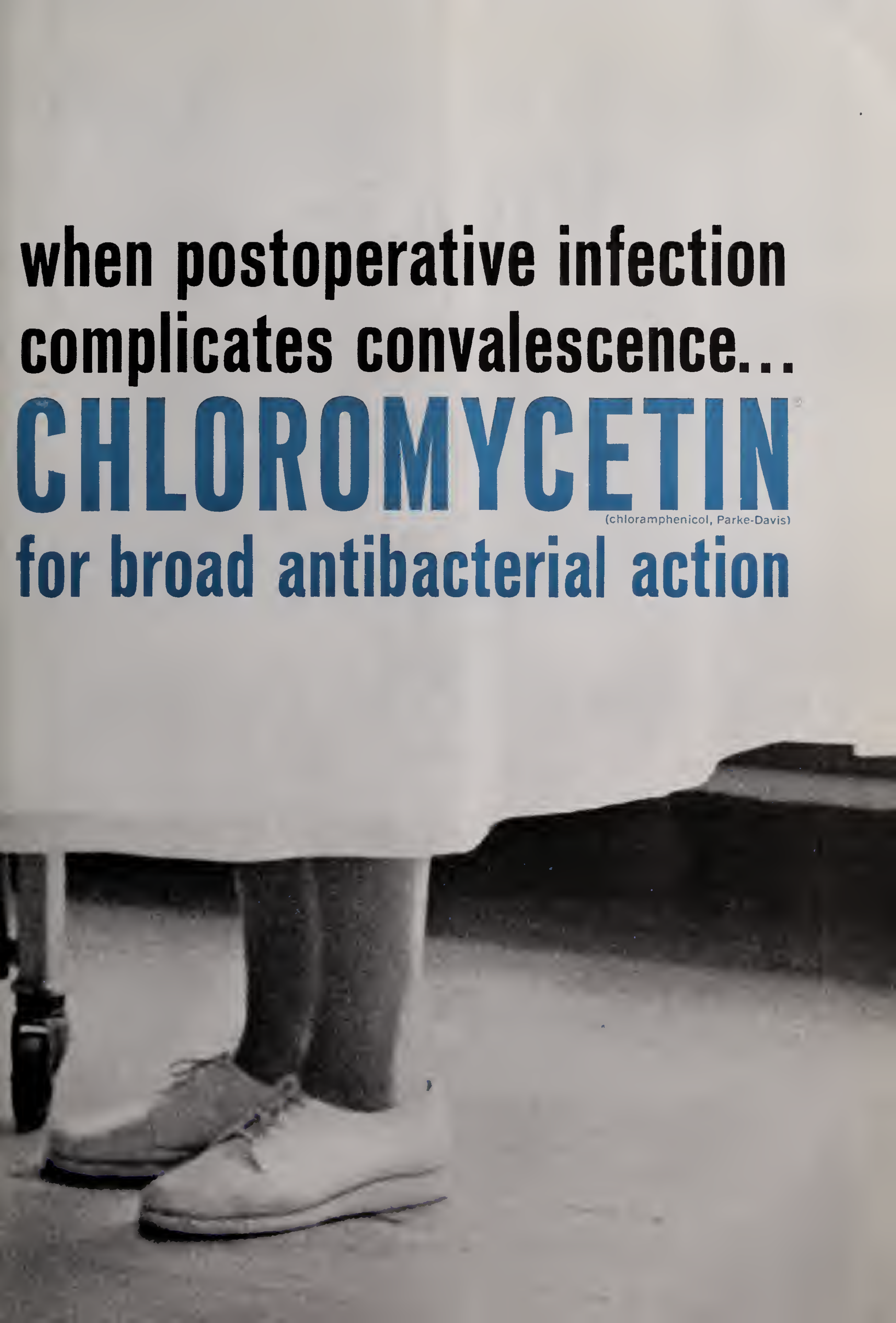
Warning: Serious and even fatal blood dyscrasias (aplastic anemia, hypoplastic anemia, thrombocytopenia, granulocytopenia) are known to occur after the administration of chloramphenicol. Blood dyscrasias have occurred after both short-term and prolonged therapy with this drug. Bearing in mind the possibility that such reactions may occur, chloramphenicol should be used only for serious infections caused by organisms which are susceptible to its antibacterial effects. Chloramphenicol should not be used when other less potentially dangerous agents will be effective, or in the treatment of trivial infections such as colds, influenza, or viral infections of the throat, or as a prophylactic agent.

Precautions: It is essential that adequate blood studies be made during treatment with the drug. While blood studies may detect early peripheral blood changes, such as leukopenia or granulocytopenia, before they become irreversible, such studies cannot be relied upon to detect bone marrow depression prior to development of aplastic anemia.

References: (1) Minchew, B. H., & Cluff, L. E.: *J. Chron. Dis.* **13**:354, 1961. (2) Wallmark, G., & Finland, M.: *Am. J. M. Sc.* **242**:279, 1961. (3) Wallmark, G., & Finland, M.: *J.A.M.A.* **175**:886, 1961. (4) Welch, H., in Welch, H., & Finland, M.: Antibiotic Therapy for Staphylococcal Diseases, New York, Medical Encyclopedia, Inc., 1959, p. 14. (5) Hodgman, J. E.: *Pediat. Clin. North America* **8**:1027, 1961. (6) Bauer, A. W.; Perry, D. M., & Kirby, W. M. M.: *J.A.M.A.* **173**:475, 1960. (7) Petersdorf, R. G., *et al.*: *Arch. Int. Med.* **105**:398, 1960. (8) Goodier, T. E. W., & Parry, W. R.: *Lancet* **1**:356, 1959.

PARKE-DAVIS

90262 *PARKE, DAVIS & COMPANY, Detroit 32, Michigan*


when postoperative infection complicates convalescence...
CHLOROMYCETIN
(chloramphenicol, Parke-Davis)
for broad antibacterial action

The

RIGGS

NATIONAL BANK

of WASHINGTON, D. C.

FOUNDED 1836

LARGEST BANK IN THE NATION'S CAPITAL

COMPLETE BANKING AND TRUST SERVICE

RESOURCES OVER $500,000,000

RIGGS NATIONAL BANK
SUCCESSOR TO RIGGS & CO.

MAIN OFFICE
1503 PENNSYLVANIA AVENUE, N.W.
(Opposite U. S. Treasury)

BRANCHES

FARMERS & MECHANICS
Wisconsin Ave. and M St., N.W.

DUPONT CIRCLE
1913 Massachusetts Ave., N.W.

PARK ROAD
14th St. and Park Rd., N.W

SEVENTH & EYE STREET
7th and Eye St., N.W.

NORTHEAST BRANCH
1348 4th St., N.E.

SEVENTH & D STREET
318 7th Street, N.W.

NORTHWEST
1779 Columbia Rd., N.W.

FRIENDSHIP
Wisconsin Ave. and Warren St., N.W.

CHEVY CHASE
Conn. Ave. and Morrison St., N.W.

LINCOLN BRANCH
17th and H Sts., N.W.

WASHINGTON LOAN
AND TRUST BRANCH
F St. at 9th, N.W.

17th & G STREET
BRANCH
14th and G Sts., N.W.

•

FACILITY
WALTER REED ARMY MEDICAL CENTER

TRUST DEPARTMENT OFFICE
1508 H Street, Northwest

Member Federal Deposit Insurance Corporation • Member Federal Reserve System

MEDICAL ANNALS

of the District of Columbia

EDITORIAL OFFICE:
1718 M Street, N.W., Washington 6
Telephone DIstrict 7-3111

COPYRIGHT, 1962,
BY THE MEDICAL SOCIETY
OF THE DISTRICT OF COLUMBIA.

Yearly Subscription, $4.50
Single Number, 50¢

Second-class postage paid at Baltimore, Md.
Published monthly at
Mount Royal and Guilford Avenues,
Baltimore 2, Maryland

Contents for July

SCIENTIFIC ARTICLES

American Psychiatry—Retrospect and Prospect. *Zigmond M. Lebensohn, M.D.*, Washington 379

Acute Renal Failure. *Rafal A. Falkiewicz, M.D.*, Washington 393

Procaine as an Antibiotic and Antifungal Agent. *John D. Foley, M.D.*, Washington 399

Clinical Trial of Isopregnenone, a New Progestational Agent. Preliminary Study. *In Whan Chang, M.D.*, Washington 402

Regression of Carcinoma of the Lung after Chemotherapy and Immune Globulin. *William L. Jamison, M.D., E. Raymond Fenton, M.D.*, Washington, *and I. L. Marks, M.D.*, Chevy Chase, Md. 406

Skull Surgery by Prehistoric Man. Part II. *Stephen Podolsky, M.D.*, Boston 409

EDITORIALS

George Cooley Takes Over 415

Narcotic Addiction in the United States 416

The Physician of the Future 417

(*Continued on page 6*)

The Physicians and Dentists Ajustment Service

A DIVISION OF

THE CREDIT BUREAU, INC.
WASHINGTON, D. C.

IN COÖPERATION WITH

ASSOCIATED CREDIT BUREAUS OF AMERICA, INC.

Will Sponsor a

Medical Accounts Management Program
on August 22 and 23, 1962, 7 p.m. to 10 p.m.
Chantilly Room, Hamilton Hotel, 14th & K Streets, N.W.

You will receive additional information shortly. This is the only training program of its kind which gives the complete Medical Credit and Collection story. If you wish additional information, call Mr. Kane at NAtional 8-0680.

Contents for July

(Continued)

SPECIAL ARTICLE

The Roll Call of the Medical Class of 1912—George Washington University. *Daniel L. Borden, M.D., F.A.C.S.*, Washington 427

MISCELLANY

President's Page: Liberty or Security—Which Will It Be? 414
Voluntary Admissions to Saint Elizabeths Hospital 418
Annual Report of President of Medical Service. *Henry L. Darner, M.D.*, Washington 419
Annual Report of Physicians' Services Committee of Medical Service. *Brooks G. Brown, M.D.*, Washington 422
Experience Rating Adopted by GHI and Medical Service 422
George Washington Medical Alumni Dinner 423
Membership 424
Clinical Center Study of Glycogen Storage Diseases 424
1962 "Health-U.S.A." Award-winners 424
Cancer Page: Services for Your Cancer Patients 426
News and Personals 429
Obituaries 432
Medical Annals Staff and Officers of Medical Society *Adv. 23*
Book Reviews *Adv. 33*
National and Regional Meetings *Adv. 48*
Index of Advertisers *Adv. 53*

Specialists in Office PLANNING

The W. D. Campbell Company knows the fine points of business furniture and furnishings. It will pay you to call on our experienced planning and decorating service. No obligation on your part.

Put your problems in the creative hands of our experts.

Phone MEtro. 8-5660

The W. D. Campbell Company
WASHINGTON'S LEADING OFFICE FURNITURE SUPPLIERS, SINCE 1917
1014 Fifteenth Street, N.W. Washington 5, D. C.
Free parking in the building

NTZ Nasal Spray gives prompt, dependable decongestion of the nasal membranes for fast symptomatic relief of hay fever. The first spray shrinks the turbinates, restores nasal ventilation and stops mouth breathing. The second spray, a few minutes later, improves sinus ventilation and drainage. Excessive rhinorrhea is reduced.

NTZ is more than a simple vasoconstrictor. It contains Neo-Synephrine® HCl 0.5%—the efficacy of which is unexcelled—to shrink nasal membranes and provide inner space; Thenfadil® HCl 0.1% for potent topical antiallergic action; and Zephiran® Cl 1:5000 (antibacterial wetting agent) to promote the spread of the decongestant components to less accessible nasal areas. NTZ is well tolerated and does not harm respiratory tissues.

NTZ Nasal Spray also provides decongestive relief for head colds, perennial rhinitis and sinusitis. Supplied in leakproof, pocket-size, squeeze bottles of 20 ml. and in bottles of 30 ml. with dropper.

helps hay fever patients forget the "season"

NTZ® Nasal Spray

Winthrop
LABORATORIES
New York 18, N. Y.

NTZ, Neo-Synephrine (brand of phenylephrine), Thenfadil (brand of thenyldiamine) and Zephiran chloride (brand of benzalkonium chloride, refined)

"How do
you feel
lately, Mrs. K?" *"Well, Doctor, some customers still 'get on my nerves'... but somehow this doesn't bother me as much... I feel better now and people seem easier to get along with..."* "Feel sleepy?" *"No, nothing like that."*

this could be your "anxiety patient" on

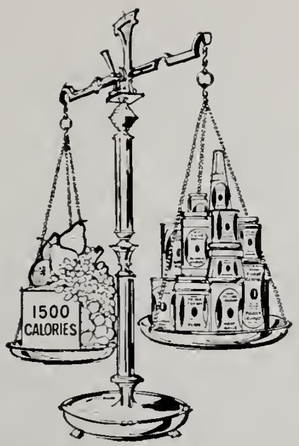
In the treatment of mild to moderate tension and anxiety, the normalizing effect of TREPIDONE leaves the patient emotionally stable, mentally alert. Adult dose: One 400 mg. tablet, four times daily. Supplied: Half-scored tablets, 400 mg., bottle of 50.

TREPIDONE®

MEPHENOXALONE LEDERLE

Request complete information on indications, dosage, precautions and contraindications from your Lederle representative, or write to Medical Advisory Department.

LEDERLE LABORATORIES, A Division of AMERICAN CYANAMID COMPANY, Pearl River, New York Lederle



A new answer to one of America's leading health problems

60 DELICIOUS FOODS THAT MAKE WEIGHT CONTROL EASIER!

Here is a practical and down-to-earth method to help overcome obesity, the nation's No. 1 diet problem—and prime stealer of doctor's consultation time. Now a new group of 60 delicious Mott's Figure Control Food products uses the best of nutrition knowledge to create quality dishes, lower in calories by an average of 50%. Indicated calorie savings can be made pleasantly and accurately while eating normal-size portions by using these calorie-controlled foods in place of higher calorie dishes. Protein, vitamin and mineral food values are retained.

Low carbohydrate, low fat: Fats are largely extracted from meats and poultry in a way that cannot be done at home. Sauces and dressings are prepared with a high proportion of non-fat milk solids, vegetable colloids, all are delectably "natural" and tempting in flavor. Fruits, juices, desserts and sauces are prepared where indicated with non-caloric sweeteners—natural fruit values are intact, extra sugars reduced. The carbohydrate, protein and fat content appears on all labels along with the calorie count. Useful for diabetic diets, too.

Easy medical tool for doctors: Less need for drugs, no possible dangerous side effects, not even temporary dislocation of meal patterns. Figure Control Foods include: Soups, Meats & Poultry, Popular Sauces, Salad Dressings, Preserves, Syrup, Fruits, Drinks, Desserts and Sweeteners.

New Mott's Figure Control® Foods offer Good Eating at Half the Usual Calories

	Quantity	Figure Control Calories	"Regular" Food Calories
Apple-Grape Drink	½ cup	20	52
Five-Fruit Juice Breakfast Drink	½ cup	20	52
Braised Beef and Vegetables	6½ oz.	184	380
Meat Balls in Brown Gravy	3½ oz.	84	280
Chopped Chicken Livers	1 oz.	31	100
Chicken a la King	3 oz.	72	230
French Style Dressing	1 tbsp.	10½	60
Brown Gravy	1 tbsp.	7	21

	Quantity	Figure Control Calories	"Regular" Food Calories
Applesauce	½ cup	48	90
Fruit Cocktail	½ cup	44	90
Cherry Pie Filling	1 oz.	20	60
Chocolate Topping	1 tbsp.	8	63
Preserves (Peach, Strawberry)	1 tbsp.	9	55
"Maplette" Syrup	1 tbsp.	9	55
Liquid or Powder Sweetener	(to equal 1 tbsp. of sugar)	0	16

MOTT'S FIGURE CONTROL
BEEF SLICES
MOTT'S FIGURE CONTROL
TOMATO SOUP
MOTT'S FIGURE CONTROL
LOW CALORIE
MOTT'S FIGURE CONTROL
PEACHES
MOTT'S FIGURE CONTROL
VEGETABLE JUICE COCKTAIL
MOTT'S FIGURE CONTROL
STRAWBERRY PRESERVES
MOTT'S FIGURE CONTROL
SPAGHETTI SAUCE

Complete menus, recipes, calorie chart available for professional distribution, with weight control guides you can distribute with confidence: all menus meet N.R.C. Recommended Daily Allowances. **Use this handy order form:**

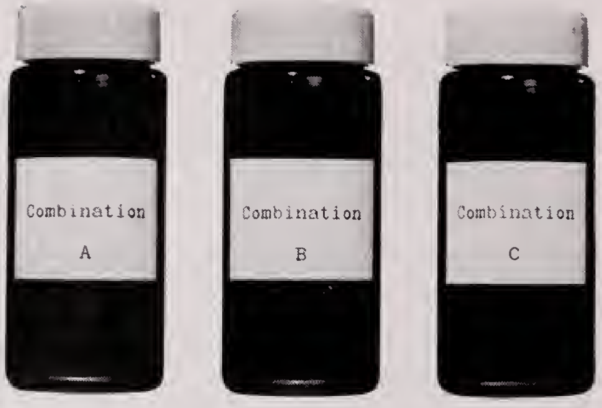
FIGURE CONTROL FOODS
Duffy-Mott Company
370 Lexington Avenue
New York 17, New York

Please send____free copies of YOUR WEIGHT CONTROL PLAN for use with patients.

Dr.____________________

Address:____________________

City:__________Zone:____State:______



These leading antihypertensive combinations are practically all alike.

This one is different...

because Ser-Ap-Es offers a unique benefit which makes blood pressure control more certain: the central and peripheral antihypertensive actions of Apresoline. By adding Apresoline to the regimens of their patients, Dupler *et al*[1] succeeded in bringing blood pressure down after rauwolfia-diuretic therapy failed. Using Ser-Ap-Es, Hobbs[2] reduced average blood pressure from 175/100 mm. Hg to 148/85 mm. Hg in 74 hypertensive patients. Side effects? Rarely a problem with Ser-Ap-Es because effective dosage is low.

SUPPLIED: SER-AP-ES Tablets, each containing 0.1 mg. SERPASIL® (reserpine CIBA), 25 mg. APRESOLINE® hydrochloride (hydralazine hydrochloride CIBA), and 15 mg. ESIDRIX® (hydrochlorothiazide CIBA). For complete information about Ser-Ap-Es (including dosage, cautions, and side effects), see current Physicians' Desk Reference or write CIBA.

1. Dupler, D.A., Greenwood, R.J., and Connell, J.T.: J.A.M.A. 174:123 (Sept. 10) 1960.
2. Hobbs, L.F.: To be published. 2/3026MB

CIBA
SUMMIT, N.J.

PERCODAN BRINGS *SPEED*...DURATION...
AND DEPTH TO ORAL ANALGESIA

in the wide middle region of pain

PERCODAN®

(Salts of Dihydrohydroxycodeinone and Homatropine, plus APC) TABLETS

fills the gap between mild oral and potent parenteral analgesics

▪ acts in 5-15 minutes ▪ relief usually lasts 6 hours or longer ▪ constipation rare ▪ sleep uninterrupted by pain

Literature on request

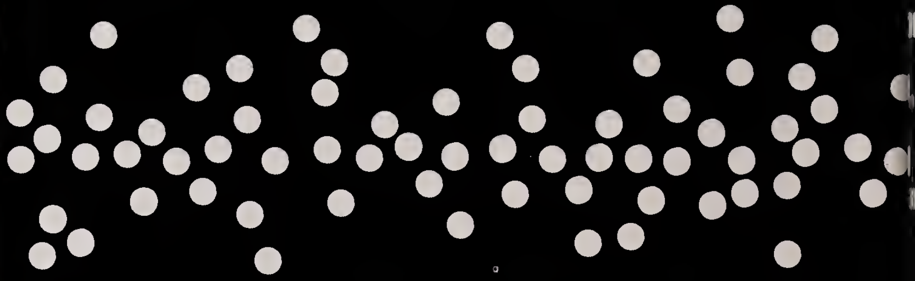
Endo®

ENDO LABORATORIES
Richmond Hill 18, New York

AVERAGE ADULT DOSE: 1 tablet every 6 hours. May be habit-forming. Federal law allows oral prescription. *Also Available:* Percodan®-Demi: the complete Percodan formula, but with only half the amount of salts of dihydrohydroxycodeinone and homatropine.

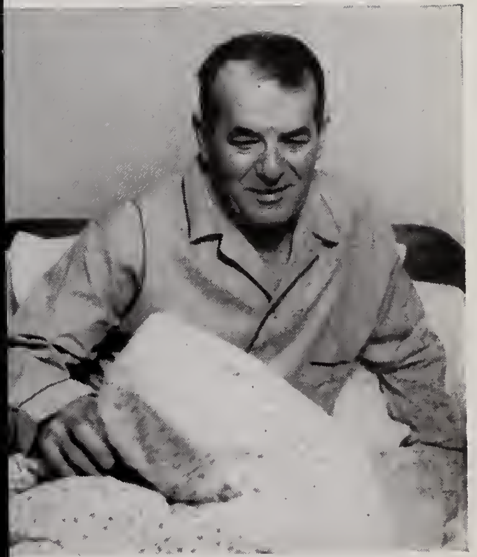
Each scored, yellow Percodan* Tablet contains 4.50 mg. dihydrohydroxycodeinone HCl, 0.38 mg. dihydrohydroxycodeinone terephthalate (warning: may be habit-forming), 0.38 mg. homatropine terephthalate, 224 mg. acetylsalicylic acid, 160 mg. acetophenetidin, and 32 mg. caffeine.

*U.S. Pats. 2,628,185 and 2,907,768



Thanks to 135 tiny "doses" throughout the

*Trademark, Reg. U.S. Pat.Off. Copyright 1962, The Upjohn Company



night, the arthritic wakes up comfortable

Morning stiffness may be reduced or even eliminated as a result of therapy with the only steroid in long-acting form. And the slow, steady release of steroid makes it possible in some cases to reduce the frequency of administration and/or the total daily steroid dosage.

Medrol* Medules*

Each hard-filled capsule contains Medrol (methylprednisolone) 4 mg. Also available in 2 mg. soft elastic capsules.

Supplied in bottles of 30 and 100.

Reminder advertisement.
Please see package insert for
detailed product information.

Upjohn

The Upjohn Company, Kalamazoo, Michigan

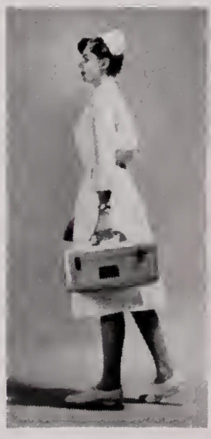
NEW PORTABLE
CAMBRIDGE
EXTERNAL
DEFIBRILLATOR
SIMPLIFIES
SPEEDS
STANDARDIZES
CARDIAC
RESUSCITATION

The design of the Cambridge Defibrillator emphasizes reliability, convenience and speed of operation—since time and reliability are of utmost importance. Based on latest medical findings, the Cambridge Defibrillator represents an important development in cardiac resuscitation. Fully portable, it offers many new operational features.

The Cambridge Defibrillator is operated by *one* person. It *eliminates* voltage estimating by providing two fixed settings—one for an adult, the other for a child. An *automatic* timing device assures the correct duration of the shock. A thumb button positioned on the right electrode—where it can be used most naturally and effectively—assures absolute control. *Exclusive* circuit tester gives positive assurance that the instrument is in "go" condition. A reset control removes any chance of an accidental second shock. The comfortable "grip" electrode handles are non-conductive and are positioned to enable quick and positive electrode contact with the patient.

No operating room, intensive care unit, or recovery room can now be considered complete without a Cambridge External Defibrillator.

Examine and test the Cambridge Defibrillator, Doctor, and see how simple, uncomplicated and uncluttered an effective Defibrillator can be . . . and inexpensive, too! A demonstration of this new, complete instrument will be gladly given—just phone your nearest representative.



EASILY PORTABLE—SELF CONTAINED UNIT. Weighs only 26 lbs. Even the smallest nurse can carry it. All components are contained within a sturdy, compact aluminum case—no accessories to forget or lose.

BUILT-IN THUMB CONTROL. Right under the doctor's thumb on the electrode handle—where he can press it naturally, firmly and at the right instant.

Send for Bulletin 480

CAMBRIDGE INSTRUMENT COMPANY, INC.
Graybar Bldg., 420 Lexington Ave., N.Y. 17, N.Y.

Branch Office:
933 Gist Ave.
Silver Spring, Md.

sedative-
enhanced
analgesia

for more satisfactory relief of anxiety-aggravated pain

PHENAPHEN®

- More satisfactory than "the usual analgesic compounds" for relieving pain and anxiety.[1]
- More effective than a standard A.P.C. preparation for relief of moderate to severe pain.[2]

Each PHENAPHEN *capsule contains:*

Acetylsalicylic acid (2½ gr.)	162 mg.
Phenacetin (3 gr.)	194 mg.
Phenobarbital (¼ gr.)	16.2 mg.
Hyoscyamine sulfate	0.031 mg.

Also available:

PHENAPHEN with CODEINE PHOSPHATE ¼ GR. (16.2 mg.) Phenaphen No. 2
PHENAPHEN with CODEINE PHOSPHATE ½ GR. (32.4 mg.) Phenaphen No. 3
PHENAPHEN with CODEINE PHOSPHATE 1 GR. (64.8 mg.) Phenaphen No. 4

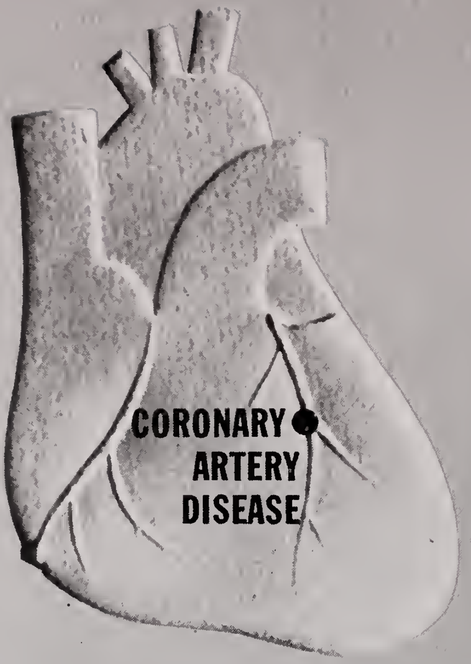
Bottles of 100 and 500 capsules.

---

[1] Meyers, G. B.: Ind. Med. & Surg. 26:3, 1957. [2] Murray, R. J.: N. Y. St. J. Med. 53:1867, 1953.

A. H. ROBINS CO., INC., RICHMOND 20, VIRGINIA
Making today's medicines with integrity... seeking tomorrow's with persistence.

Robins



● **"...now the leading cause of death in diabetic patients."[1]**

Diseases of the cardiovascular-renal system account for about three-fourths of deaths among diabetic patients, with heart disease responsible for approximately one-half the total,[2,3] and coronary atherosclerosis the major cause of cardiac lesions.[1] While some feel that diabetics are predisposed, perhaps by heredity, to early onset of vascular disease, considered opinion is that vascular degeneration can be delayed or modified with "...careful and consistent control of diabetes from the time of diagnosis...."[4]

As a major step toward achieving *careful and consistent control,* you can teach your patients to do urine-sugar testing in the way most likely to assure continued cooperation—with the CLINITEST® Urine-Sugar Analysis Set.

for quantitative estimation

color-calibrated

clinitest®

urine sugar

- continued, close control
- graphic *Analysis Record* encourages co-operation...reveals degree of control at a glance...helps patient maintain control

for "yes-or-no" enzymatic testing

new, improved

DIP AND READ **clinistix®**

urine glucose

10-second reading...longer strip for easier handling...new color chart and color barrier for test area...in glass for protection

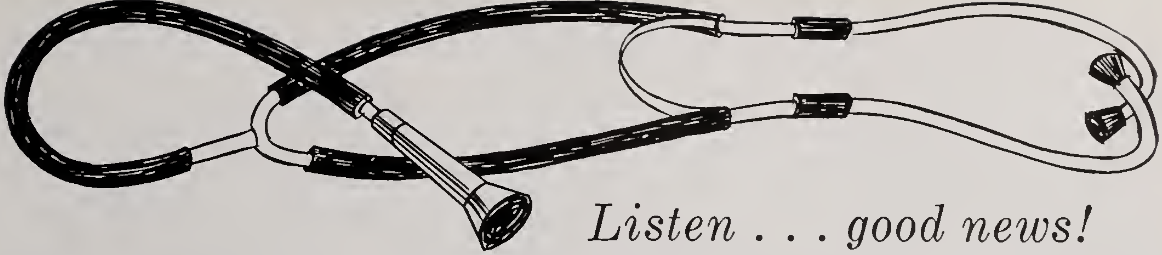
Supplied: CLINITEST Urine-Sugar Analysis Set (with bottle of 36 tablets and 2 foil-wrapped tablets); refill boxes of 24 Sealed-in-Foil Reagent Tablets and bottles of 36 tablets. CLINISTIX Reagent Strips in bottles of 60.

References: (1) Root, H. F., and Bradley, R. F., in Joslin, E. P.; Root, H. F.; White, P., and Marble, A.: The Treatment of Diabetes Mellitus, ed. 10, Philadelphia, Lea & Febiger, 1959, pp. 411, 437. (2) Joslin, E. P.; Root, H. F.; White, P., and Marble, A.: *ibid.*, pp. 188-189. (3) Marks, H. H., *et al.:* Diabetes 9:500, 1960. (4) Marble, A., in Summary of Conference on Diabetic Retinopathy, Survey Ophth. (Part 2) 6:611-612, 1961.

AMES
COMPANY, INC
Elkhart • Indiana
Toronto • Canada

AMES *products are available through your regular supplier.*

21482



Listen . . . good news!

GET BROADER PROTECTION AGAINST CLAIMS RESULTING FROM PRACTICE OF MEDICINE

with St. Paul's Professional Liability Insurance

1. **Broader Protection.** A *St. Paul* policy assures you of complete "professional services" protection.
2. **Absence of Exclusions.** All professional liability policies are not the same. The *St. Paul* policy has only one exclusion—Workman's Compensation as it applies to your own employees.
3. **Experienced, Sound Company.** The *St. Paul* has established an enviable record of competence extending over more than 100 years.
4. **Effective Defense and Prevention.** Close liaison with doctors and medical societies helps the Company to pinpoint areas of risk and to develop educational material which assists doctors in avoiding claims.

For complete information on "broader protection" Professional Liability Insurance see your nearest *St. Paul* agent.

THE ST. PAUL
INSURANCE COMPANIES

Serving you around the world . . . around the clock

St. Paul Fire & Marine Insurance Company
St. Paul Mercury Insurance Company
Western Life Insurance Company

Approved Carrier of The Medical Society of the District of Columbia

The following Agents are ready to serve you and are as close as your telephone:

M. Abrams & Co., 514 Washington Bldg.
Washington 5, D.C. NAtional 8-6578

Anderson & Company, Inc., 1832 M St., N.W.,
Washington 6, D.C. FEderal 8-4730

A. H. Baker & Company, 930 Woodward Bldg.,
Washington 5, D.C. EXecutive 3-2460

District Agency Company, 800 Investment Bldg.
1511 K Street, N.W., Washington 5, D. C.
NAtional 8-8756

Eig & McKeever, ℅ Eig & McKeever
Silver Spring, Maryland. JUniper 8-8200

Feldmann Insurance Agency, 267 Carroll St., N.W.,
Washington 12, D.C. TUckerman 2-4079

Greater Washington Agency, Inc., 419 Union
Trust Building, Washington 5, D. C.
STerling 3-8383

Harrell Brothers & Campbell, Suite 101,
1757 K St., N.W., Washington 6, D.C.
STerling 3-3555

Insurance Services Co., Inc.
3408 Wisconsin Ave., N.W.
Washington 16, D.C.
WOodley 6-8180

Lampson & Ashley Ins. Agency
7044 Carroll Ave., Takoma Park, Md.
JUniper 5-7166

LeRoy Mark, Inc., 408 Colorado Bldg.,
Washington 5, D.C. NAtional 8-0601

Martens & Moore. Inc., 3408 Wisconsin Ave., N.W.,
Washington 16, D.C. EMerson 3-5300

McDermott Insurance, 1130 17th St., N.W.,
Washington 6, D.C. DIstrict 7-1114

Harry Merkin Company, 815 15th Street, N.W.,
Washington 5, D.C. STerling 3-4977

H. Gabriel Murphy & Co., Inc.,
1001 Connecticut Ave., N.W., Washington 6, D.C.
DIstrict 7-9300

Howard W. Phillips & Co., 1820 N St., N.W.,
Washington 6, D.C. FEderal 8-2121

Russell, Marsh & Kennedy, Inc., Marsh Building,
1832 M St., N.W., Washington 6, D.C.
FEderal 8-7600

Victor O. Schinnerer & Co., Inc.
1131 Investment Bldg., Washington 5, D.C.
REpublic 7-1929

Walker & Dunlop Agency, Inc.
905 16th Street, N.W.
Washington 6, D.C.
STerling 3-5050

Watson & Watson, Sheraton Bldg.,
711 14th St., N.W., Washington 5, D.C.
DIstrict 7-7166

Young & Simon, 340 Woodward Bldg.,
Washington 5, D.C.
DIstrict 7-5180

WASHINGTON, D.C. OFFICE
910 17th St., N.W. Washington 6, D.C.
COMPLETE CLAIMS SERVICE—Tel. 296-4474

Put your low-back patient back on the payroll

Soma relieves stiffness –stops pain, too

YOUR CONCERN: Rapid relief from pain for your patient. Get him back to his normal activity, fast!

HOW SOMA HELPS: Soma provides direct pain relief while it relaxes muscle spasm.

YOUR RESULTS: With pain relieved, stiffness gone, your patient is soon restored to full activity—often in days instead of weeks.

Kestler reports in controlled study: *Average time for restoring patients to full activity: with Soma, 11.5 days; without Soma, 41 days.* (*J.A.M.A. Vol. 172, No. 18, April 30, 1960.*)

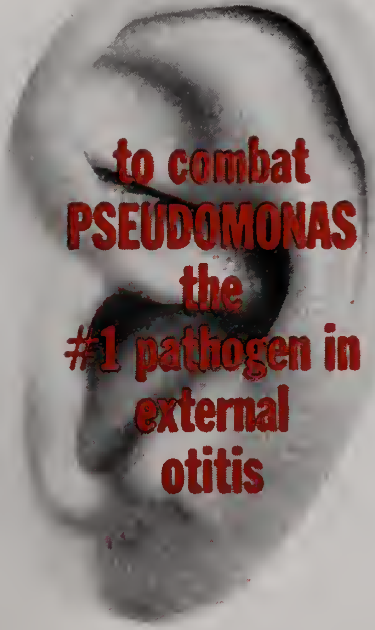
Soma is notably safe. Side effects are rare. Drowsiness may occur, but usually only in higher dosages. Soma is available in 350 mg. tablets. USUAL DOSAGE: 1 TABLET Q.I.D.

The muscle relaxant with an independent pain-relieving action

SOMA®

(carisoprodol, Wallace)

Wallace Laboratories, Cranbury, New Jersey



'CORTISPORIN'®

brand

OTIC DROPS (sterile)

the #1 therapy for inflamed, infected ears

Because it provides Polymyxin B for the eradication of Pseudomonas, the prime cause of external otitis, 'Cortisporin' is the logical choice of treatment for inflamed, infected ears. Polymyxin B is the antibiotic specific for *Pseudomonas aeruginosa* infections, and is, for this pathogen, the standard of effectiveness against which other antibacterials are measured.

- Anti-inflammatory
- Antipruritic
- Antibacterial

Each cc. contains:

'Aerosporin'® brand Polymyxin B sulfate	10,000 units
Neomycin Sulfate (Equivalent to 3.5 mg. Neomycin Base)	5 mg.
Hydrocortisone	10 mg. (1%)

Bottles of 5 cc. with sterile dropper.

Literature available on request.

BURROUGHS WELLCOME & CO. (U.S.A.) INC., Tuckahoe, N. Y.

blood pressure approaches normal more readily, more safely....simply with Salutensin®

(hydroflumethiazide, reserpine, protoveratrine A—antihypertensive formulation)

Early, efficient reduction of blood pressure. Only Salutensin combines the advantages of protoveratrine A ("the most physiologic, hemodynamic reversal of hypertension"[1]) with the basic benefits of thiazide-rauwolfia therapy. The potentiating/additive effects of these agents[2-8] provide increased antihypertensive control at dosage levels which reduce the incidence and severity of unwanted effects.

Salutensin combines Saluron® (hydroflumethiazide), a more effective 'dry weight' diuretic which produces up to 60% greater excretion of sodium than does chlorothiazide[9]; reserpine, to block excessive pressor responses and relieve anxiety; and protoveratrine A, which relieves arteriolar constriction and reduces peripheral resistance through its action on the blood pressure reflex receptors in the carotid sinus.

Added advantages for long-term or difficult patients. Salutensin will reduce blood pressure (both systolic and diastolic) to normal or near-normal levels, and maintain it there, in the great majority of cases. Patients on thiazide/rauwolfia therapy often experience further improvement when transferred to Salutensin. Further, therapy with Salutensin is both economical and convenient.

Each Salutensin tablet contains: 50 mg. Saluron® (hydroflumethiazide), 0.125 mg. reserpine, and 0.2 mg. protoveratrine A. See Official Package Circular for complete information on dosage, side effects and precautions.

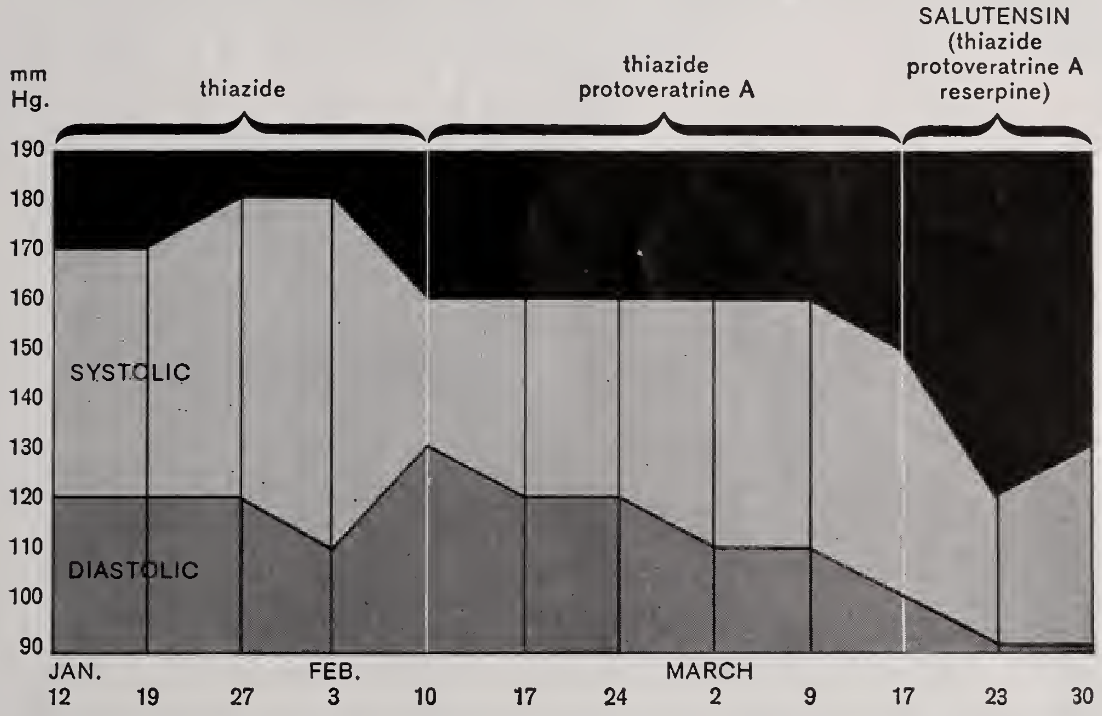
Supplied: Bottles of 60 scored tablets.

References: 1. Fries, E. D.: In Hypertension, ed. by J. H. Moyer, Saunders, Phila., 1959 p. 123. 2. Fries, E. D.: South M. J. **51**:1281 (Oct.) 1958. 3. Finnerty, F. A. and Buchholz, J. H.: GP **17**:95 (Feb.) 1958. 4. Gill, R. J., et al.: Am. Pract. & Digest Treat. **11**:1007 (Dec.) 1960. 5. Brest, A. N. and Moyer, J. H.: J. South Carolina M. A. **56**:171 (May) 1960. 6. Wilkins R. W.: Postgrad. Med. **26**:59 (July) 1959. 7. Gifford, R. W., Jr.: Read at the Hahnemann Symp. on Hypertension, Phila. Dec. 8 to 13, 1958. 8. Fries, E. D., et al.: J. A. M. A. **166**:137 (Jan. 11) 1958. 9. Ford, R. V. and Nickell, J.: Ant. Med. & Clin. Ther. **6**:461, 1959.

all the antihypertensive benefits of thiazide-rauwolfia therapy plus the specific, physiologic vasodilation of protoveratrine A

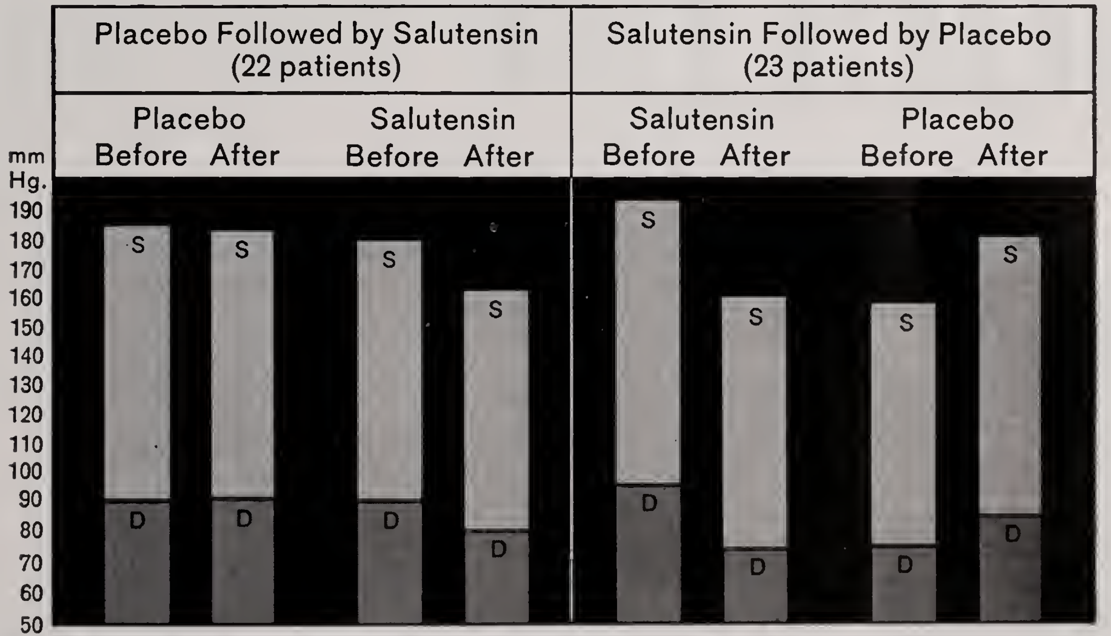
11 WEEKS TO LOWER BLOOD PRESSURE TO DESIRED LEVELS BY SERIAL ADDITION OF THE INGREDIENTS IN SALUTENSIN IN A TEST CASE

(Adapted from Spiotta, E. J.: Report to Department of Clinical Investigation, Bristol Laboratories)



3½ WEEKS TO LOWER BLOOD PRESSURE TO DESIRED LEVELS USING SALUTENSIN FROM THE START OF THERAPY IN A "DOUBLE BLIND" CROSSOVER STUDY

Mean Blood Pressures–Systolic (S) and Diastolic (D)



In this "double blind" crossover study of 45 patients, the mean systolic and diastolic blood pressures were essentially unchanged or rose during placebo administration, and decreased markedly during the 25 days of Salutensin therapy. (Smith, C. W.: Report to Department of Clinical Investigation, Bristol Laboratories.)

BRISTOL LABORATORIES/Div. of Bristol-Myers Co., Syracuse, N.Y.

BRISTOL

NEW!

Around the clock relief for
HAY FEVER DISTRESS

ISOCLOR® TIMESULE®

A NEW COMPREHENSIVE RELIEF

- **Relief usually starts in minutes**—to open nasal passages, stop running nose and eyes, sneezing, wheezing, itching and post-nasal drip
- **Relief usually lasts up to 12 hours** with a single oral dose
- **Gives both** upper respiratory decongestion and bronchodilatation to relieve chest discomfort
- **With minimal** drowsiness, CNS or pressor stimulation

Isoclor Timesule, actual size

MADE POSSIBLE BY THE NEW TIMESULE RELEASE MECHANISM

Schematic drawing of Timesule cell showing dialysis through permeable coating.

Release with the Isoclor Timesule is at a relatively even, constant rate, independent of gastrointestinal motility, pH, or enzymatic activity. Each Timesule pellet is actually a micro dialysis cell, consisting of a drug core with coating of dialyzing membrane of precisely controlled permeability. Approximately 20% of active drugs are released within one hour and 80% in 8 hours. Peaks and valleys of over-release and under-release are minimized for constant, controlled relief with minimum side effects.

EACH ISOCLOR TIMESULE CONTAINS:

Chlorpheniramine maleate	10 mg.
d-Isoephedrine HCL	65 mg.

In a special form providing prolonged therapeutic effect.

DOSE: Adults: One Timesule every 12 hours, or as directed.

WARNING: Use with caution in patients suffering from hypertension, cardiac disease, hyperthyroidism or diabetes. Patients susceptible to the soporific effect of chlorpheniramine should be warned against driving or operating machinery should drowsiness occur.

CHARLES C. HASKELL & COMPANY DIV ARNAR-STONE LABORATORIES, INC.
Richmond, Virginia

MEDICAL ANNALS
OF THE DISTRICT OF COLUMBIA

Editorial and Business Offices: 1718 M Street, N.W., Washington 6, D. C.

Editor

Wallace M. Yater, M.D.

Managing Editor

George W. Cooley

Assistant Editor

A. Louise Eckburg

EDITORIAL BOARD

Frederic G. Burke, M.D.
I. Phillips Frohman, M.D.
Winfred Overholser, M.D.
Thomas M. Peery, M.D.
Herbert P. Ramsey, M.D.
George E. Schreiner, M.D.
Donald Stubbs, M.D.
Charles Stanley White, M.D.

CONSULTING EDITORS

Irving B. Brick, M.D.
Professor of Medicine,
Georgetown University School of Medicine

Captain Thomas E. Cone, Jr., MC, USN
Chief, Pediatric Service, United States Naval Hospital

W. Montague Cobb, M.D.
Professor of Anatomy
Howard University College of Medicine

Vernon Knight, M.D.
Clinical Director, National Institute of Allergy and Infectious Diseases, National Institutes of Health

Walter Kurland, M.D.
Admitting-Personnel Physician,
Veterans Administration Hospital

Colonel Conn L. Milburn, Jr., MC, USA
Director, Walter Reed Army Institute of Research, Walter Reed Army Medical Center

Alvin E. Parrish, M.D.
Associate Professor of Medicine, and Associate Dean,
George Washington University School of Medicine

Colonel Frank M. Townsend, MC, USAF
Director, Armed Forces Institute of Pathology

THE MEDICAL SOCIETY OF THE DISTRICT OF COLUMBIA
1962
OFFICERS

J. Spencer Dryden, *President*
Karl C. Corley, *President-elect*
Frank S. Pellegrini, *First Vice President*
Naomi M. Kanof, *Second Vice President*
Mr. George W. Cooley, *Secretary-Treasurer*

EXECUTIVE BOARD

James W. Watts, *Chairman, term expires 1962*
W. LeRoy Dunn, *term expires 1963*
Victor R. Alfaro, *term expires 1964*
Duane C. Richtmeyer, *term expires 1965*

Ex Officiis

J. Spencer Dryden
Raymond T. Holden
Karl C. Corley
Mr. George W. Cooley, *Secretary*

BOARD OF CREDENTIALS

Edward W. Nicklas, *Chairman, term expires 1962*
William A. Howell, *term expires 1963*
Luther W. Gray, *term expires 1964*

DELEGATES

American Medical Association

Raymond T. Holden
C. Willard Camalier, Jr.
Clifton R. Gruver, *Alternate*
Thomas M. Peery, *Alternate*

LEGAL COUNSEL

Warren E. Magee

In summer diarrheas

prompt
4 way
check

- ✓ Curbs excessive peristalsis
- ✓ Adsorbs toxins and gases
- ✓ Soothes inflamed mucosa
- ✓ Provides intestinal antisepsis

POMALIN

TRADEMARK

Liquid

EFFECTIVE ANTIDIARRHEAL

FORMULA: *Each 15 ml. (tablespoon) contains:*

Sulfaguanidine U.S.P.	2 Gm.
Pectin N.F.	225 mg.
Kaolin	3 Gm.
Opium tincture U.S.P.	0.08 ml.

(equivalent to 2 ml. paregoric)
Warning: May be habit forming.

DOSAGE: **Adults**—Initially 1 or 2 tablespoons from four to six times daily, or 1 or 2 teaspoons after each loose bowel movement; reduce dosage as diarrhea subsides.

Children—½ teaspoon (=2.5 ml.) per 15 pounds of body weight every four hours day and night until stools are reduced to five daily, then every eight hours for three days.

SUPPLIED: *Bottles of 1 pint (raspberry flavor, pink color)*
Exempt Narcotic. Available on Prescription Only.

Winthrop
LABORATORIES
New York 18, N. Y.

*only topical antifungal with sweat-inhibiting action**

first orally effective antifungal antibiotic for ringworm

Schering

advicin®
brand of topical antifungal preparation

ORAL
fulvicin®
brand of griseofulvin

to lighten the step in athlete's foot—
itching, sweating, painful walking
are over—sooner—with
combined topical-oral therapy for
an "on-the-double" antifungal attack

For daytime use, Advicin Powder, 2 ounce can. **For nighttime use,** Advicin Cream, 50 gram tube.

For complete details, consult latest Schering literature available from your Schering Representative or Medical Services Department, Schering Corporation, Bloomfield, New Jersey.

*ADVICIN contains PRANTAL® (brand of diphemanil methylsulfate) 2%, undecylenic acid 5%, and salicylic acid 3%.

S 921

a look
at the
literature
CORDRAN™
(flurandrenolone, Lilly)

"Treatment results were good, and in many cases a dramatic response was noted. Many of the cases had previously failed to respond to various types of therapy including, in some instances, other topical corticosteroid preparations."

—Gray, H. R., Wolf, R. L., and Doneff, R. H.: Evaluation of Flurandrenolone, a New Topical Corticosteroid, Arch. Dermat., *84:*18, 1961.

A look at the products—Cordran cream and ointment are new corticosteroid preparations especially formulated for the skin. Each Gm. contains 0.5 mg. Cordran.

Cordran™-N cream and ointment combine Cordran and the wide-spectrum antibiotic, neomycin. Each Gm. contains 0.5 mg. Cordran and 5 mg. neomycin sulfate (equivalent to 3.5 mg. base). Cordran-N is particularly useful in steroid-responsive dermatoses complicated by potential or actual skin infections.

All forms are supplied in 7.5 and 15-Gm. tubes.

Cordran™-N (flurandrenolone with neomycin sulfate, Lilly) This is a reminder advertisement. For adequate information for use, please consult manufacturer's literature. Eli Lilly and Company, Indianapolis 6, Indiana. 240241

Lilly
QUALITY/RESEARCH/INTEGRITY

MEDICAL ANNALS

of the District of Columbia

July 1962

VOLUME XXXI • NUMBER 7

American Psychiatry—Retrospect and Prospect*

ZIGMOND M. LEBENSOHN, M.D.

Clinical Professor of Psychiatry, Georgetown University School of Medicine; Chief, Department of Psychiatry, Sibley Memorial Hospital, Washington

> "When one observes the movements in the incidence of diseases, and notes the increase of little understood diseases and the decrease of well understood diseases, one should feel indebted to those who bring to the attention of the profession those diseases in which the present status of diagnosis and treatment is not satisfactory. There is much too little taught in the schools, and there is too little interest on the part of the average practitioner concerning these increasingly prevalent psychological troubles."—George Martin Kober (1916).[1]

It is indeed a great honor to be selected by my colleagues in the Medical Society to deliver the Thirty-eighth Kober Lecture. On reading the roster of distinguished speakers who have preceded me I am filled with mixed feelings of humility and challenge. I hope that my remarks will in some measure establish a harmony between the ideals of medical science as exemplified by George Martin Kober and the purposes and methods of modern American psychiatry.

Among my illustrious predecessors there has been but one other psychiatrist, Dr. William Alanson White,[2] who, in 1929, lectured on "The Social Significance of Mental Diseases." It may be safe to assume that the remarkable Dr. Kober, who was a vigorous 79 at the time, attended this lecture. It is my firm conviction that Dr. Kober would have been greatly pleased by many of the changes which have taken place in American psychiatry in the third of a century that has elapsed since Dr. White spoke.

During these 33 years psychiatry in America has come into its own. The discovery of effective somatic therapies, the refinement of psychotherapeutic techniques, and the development of the psychotropic drugs are only a few of the major advances to be noted here. Psychiatry is now an important part of the core curriculum of all medical schools. The establishment of the American Board of Psychiatry and Neurology in 1933 has done much to place psychiatry on an equal footing with the other medical specialties. Modern psychiatric research is no longer restricted to the confines of the large state hospital nor to the intimacies of the psychoanalytic couch but has extended to the modern laboratory replete with the most sophisticated instrumentation. Dr. Kober, who was tireless in his efforts to combat antivivisection, would have felt greatly rewarded to observe the important discoveries brought about by animal research, especially in the fields of psychopharmacology and operant conditioning.

---

* The Kober Lecture for 1962, delivered at Georgetown University Medical Center in Washington, D. C., March 28, 1962.

The title of my lecture this evening implies a survey and a forecast. Although it is easier to be retrospective than "prospective" I shall attempt to be both. "What Is Past Is Prologue" says the inscription on the Archives Building and, being a firm believer in making the best possible uses of the past, I shall begin there. It will be my purpose to trace the development of American psychiatry from its earliest beginnings to its present state; to point out its strengths and weaknesses; to show how American attitudes have influenced American law, which in turn has influenced American psychiatry; to follow, if we can, American psychiatry's on-again off-again flirtation with its two competing mistresses, Medicine and Psychology; and, finally, to suggest a constructive course for the future, short of bigamy.

EARLY FOUNDATIONS OF AMERICAN PSYCHIATRY

American psychiatry had its somewhat inauspicious beginnings in the rugged frontier of Colonial America. The traditions and practices of 17th and 18th century European psychiatry had little to recommend them, but they greatly influenced our early beginnings. It was an age of witchcraft. The devil theory of mental illness prevailed. The most fortunate of the mentally ill in Colonial days were kept hidden by their families. The next luckiest were those who were allowed to roam the countryside as wild outcasts. The really unfortunate ones—the seriously manic, delusional, and hallucinated—were all too often whipped, pilloried, jailed, or burned at the stake as witches. Although we shared in the witchcraft delusions so prevalent in Europe, Shryock points out that "Americans . . . never were so completely victimized by this hysteria as were the peoples of France and Germany—historical hullabaloos about Salem to the contrary notwithstanding. In like manner, the establishment of 'asylums' for mental cases in the United States, even prior to 1843, was clearly inspired by similar developments abroad; yet this program became more extensive and possibly more significant than the parent movement overseas."[3]

The first American hospital which provided for "The Reception and Cure of Lunaticks" was the Pennsylvania Hospital, founded in 1751. Benjamin Franklin was one of the founders of this historic institution. Although the treatment given there included chaining, purging, emetics and blistering (which were common practices of the time) Albert Deutsch[4] still considered this to be the first faint beginnings of a therapeutic rather than a purely custodial approach.

Dr. Benjamin Rush (1745–1813) of Philadelphia, signer of the Declaration of Independence, and one of the first American physicians to devote serious attention to mental disease, was also active in the Pennsylvania Hospital and occasionally criticized its practices. Despite his eminent position, he was a man of very positive beliefs and stubbornly entertained many theories (such as the arterial origin of disease) that he probably delayed for many years the development of a more rationalistic school of American psychiatry. In his major work, "Medical Inquiries and Observations upon Diseases of the Mind," we find theoretical justification for the purgatorial practices of the period, such as blistering, induced vomiting, bleeding and the use of such special techniques as the ducking chair and the gyrator, which were certainly primitive forms of "shock therapy." On the other hand, he advised the use of moral suasion, occupational therapy, and pleasant companions. He also suggested that patients would benefit by recording their memories and experiences, thus anticipating in a very general way some of the procedures of psychoanalysis. Despite the crudities which now shock our sensitivities, Rush was a product of the Enlightenment and expressed in many ways the humanitarianism of the period.

MORAL TREATMENT

The first publicly supported mental hospital was established in Williamsburg in 1773, and others followed in fairly rapid succession. Once established, the Colonial asylums for "lunaticks" provided a fertile soil in which the seeds of modern psychiatry could take root, and the middle decades of 19th century America reaped a rich harvest from the planting. This was a splendid period in psychiatric history, generally referred to as the era of "moral treatment." Here, again, our predecessors borrowed their conceptions from the work of Pinel and Esquirol in France and from William Tuke in England, who had struck the chains from the mentally ill in their asylums around the end of the 18th century and instituted a régime of kindly, humane, and progressive medical care. The Americans went far beyond mere imitation. For a few decades they brought moral treatment to a much more advanced stage of development and spread its benefits to a greater number of people than in the countries of its origin. The spirit of moral treatment was captured by Charles Dickens on his American tour, who in 1842 reported on a visit to what is now the Boston State Hospital. He said:

> "The State Hospital for the insane (is) admirably conducted on those enlightened principles of conciliation and kindness which 20 years ago would have been worse than heretical . . . every patient in this asylum sits down to dinner with a knife and fork; and in the midst of them sits the gentleman (the superintendent . . .). At every meal moral influence alone restrains the more violent among them from cutting the throats of the rest; but the effect of that influence is reduced to an absolute certainty and is found, even as a means of restraint, to say nothing of it as a means to cure a hundred times more efficacious than all the straight-waistcoats, fetters, and handcuffs that ignorance, prejudice and cruelty have manufactured since the creation of the world.
>
> "Once a week they have a ball in which the Doctor and his family with all the nurses and attendants take an active part. . . . Immense politeness and good breeding are observed throughout. They all take their tone from the Doctor; and he moves a very Chesterfield among the company. . . . It is obvious that one great feature of this system is the inculcation and encouragement, even among such unhappy persons, of a decent self-respect."

It is no wonder, then, that a wave of optimism swept over the mental hospitals in America from 1800 to 1850. The "cult of curability" was everywhere evident in the psychiatry of the period. It found its most florid expression in Dr. William Maclay Awl (1799–1876) of Ohio who was so irrepressibly optimistic that he became known as Dr. "Cure-all" Awl. Claims were made of 90 to 100 per cent cure. And all this before the days of the tranquilizers! Other developments of the period were equally encouraging. New concepts for mental hospital construction were described by Kirkbride of Philadelphia which influenced hospital design for almost a century.[3] Isaac Ray (1807–1881) spoke so bravely and forcefully on the legal aspects of psychiatry that his ideas regarding commitment laws and criminal responsibility are even now, more than a century later, considered to be most modern and enlightened in their conception.

THE GREAT SETBACK

For reasons not altogether understood, the social upheavals caused by the industrial revolution led to changes in the social and cultural attitudes toward the mentally ill both in Europe and America after 1850, and most especially after the Civil War in our country. Rugged individualism was on the march. Sturdy pioneers were pushing our frontier toward the Pacific. It was a time of incredible personal successes and catastrophic failures. It was a time of indifference to those who fell by the wayside, including the mentally ill. The moral treatment régimes in the earlier mental hospitals began to give way to this indifference. Hospital personnel were reduced to pawns in the rough and tumble politics of the day. Dirt, filth, overcrowding, and isolation from medicine became the rule, a rule that in the main prevailed until quite recent times.

During this time the plight of the mentally ill was generally ignored except by occasional public-spirited reformers, chief among whom was that tireless crusader, Dorothea Lynde Dix (1802–1887). Her remarkable efforts were successful in establishing at least 32 mental hospitals in America and the British Isles, one of them being our own St. Elizabeths Hospital. Most of these hospitals were located in rural or semi-rural areas in order that the mental patients might benefit by the peaceful surroundings and fresh country air which were considered at that time to be essential for recovery. It is one of the ironies of history that this laudable motive succeeded in forcing a geographical as well as a professional isolation on American psychiatry which kept it out of the main stream of American Medicine for almost 100 years.

American psychiatry was severely castigated for its isolation in a memorable address delivered by the great American neurologist, S. Weir Mitchell[5] (1829–1914), in 1894. It was on the occasion of the 50th anniversary of the founding of the Association of Medical Superintendents of American Institutions for the Insane (now the American Psychiatric Association) and Dr. Mitchell had accepted the invitation to speak only after insistent urging since he had openly warned the inviting committee of his critical opinions, some of which are contained in the following excerpt:

> "With you it has been different. You were the first of the specialists and you have never come back into line. It is easy to see how this came about. You soon began to live apart, and you still do so. Your hospitals are not our hospitals; your ways are not our ways. You live out of range of critical shot; you are not preceded and followed in your ward work by clever rivals, or watched by able residents fresh with the learning of the school."

Mitchell was harsh, but he was essentially right. In spite of the dark picture he painted, there were some notable exceptions. In 1869 George M. Beard (1839–1883), a brilliant and courageous pioneer in early psychosomatic medicine, coined the term "neurasthenia" and described the entity clinically. Later, in 1883, Dr. E. C. Spitzka published his "Manual of Insanity," in which he was the first to use the term "paranoia" in the sense we use and understand the word today. Lewis[6] cites this little-known fact and refers to paranoia as an "American-named psychosis." It is also interesting to note that Spitzka, primarily a neurologist, entertained more progressive ideas about psychiatry than his organically-oriented contemporary, Dr. John P. Gray, long-time editor of the *American Journal of Insanity*. This difference is seen most sharply by comparing their testimonies in the trial of Guiteau, the assassin of President Garfield. Guiteau, obviously suffering from paranoid delusions, was declared by Gray to be responsible for his acts because he did not have a disease of the brain. Spitzka, the neurologist, testified that Guiteau was mentally ill by virtue of his well-defined mental symptoms.[6]

Perhaps goaded into action by Dr. Mitchell's accusations, the mental hospitals of America slowly began to move closer to medicine. Little by little the name "asylum" was replaced by the more palatable term "hospital," a mere euphemism in many cases, perhaps, but at least expressive of the yearning for a more modern and scientific approach to mental diseases. Laboratories, specializing chiefly in neuropathology, began to appear in the better mental hospitals. According to Nolan D. C. Lewis,[6] Dr. I. W. Blackburn of St. Elizabeths hospital was, in 1884, the first full-time pathologist in an American mental hospital. Neuropathologists, and other scientists, many of them European-trained, began using the vast untapped resources of the mental hospitals for productive research.

THE FOUR CORNERSTONES OF MODERN PSYCHIATRY

It was in the ferment of scientific discovery in the last years of the 19th century and the early years of the 20th that the four cornerstones of modern medical psychiatry were laid: neuropathology, neurophysiology, psychology, and psychodynamics. Let us highlight briefly some of the achievements in these fields.

The work of Alzheimer, Blackburn, van Gieson (1865–1913), Huntington, Pick, Schilder (1886–1940), and a host of others helped clarify the neuropathologic background for many of the organic brain disorders. Noguchi (1876–1928), working in the Rockefeller Institute, was the first to demonstrate the *Treponema pallidum* in the brain tissue of the general paretic.

In the physiology of the emotions three men stand out: the British neurophysiologist, Sir Charles Sherrington (1857–1952), the Russian physiologist, I. P. Pavlov (1849–1936) with his studies on conditioned reflex responses, and the American physiologist, Walter Cannon (1871–1945) with his theories of homeostasis and the response of the organism to profound emotional stress. Without this basic groundwork the present structure of psychosomatic or "total" medicine could not have evolved under the guiding hands of such men as Adolf Meyer, Smith Ely Jelliffe and William A. White, all Americans. However beholden we may be to Europe in other respects, psychosomatic medicine appears to be uniquely American in its origin, nature, and development, and we may well be proud of its accomplishments.

Psychology, psychometrics, learning theory, and projective testing likewise began to exert their influence around the turn of the century. Alfred Binet (1857–1911) developed his objective measurements of intelligence. The American, Thorndike,[7] with his animal experiments provoked even the austere Pavlov to grateful acknowledgment. In his preface to the first Russian edition of his "Lectures on Conditioned Reflexes," Pavlov[8] wrote:

> "Some years after the beginning of the work with our new method, I learned that somewhat similar experiments on animals had been performed in America, and indeed, not by physiologists, but by psychologists. Thereupon, I studied in more detail the American publications and now I must acknowledge that the honor of having made the first steps along this path belongs to E. L. Thorndike. By two or three years his experiments preceded ours and his book must be considered as a classic both for its bold outlook on an immense task and for the accuracy of its results."

However, it was not until the advent of Freud and the psychoanalytic movement he founded that the world experienced a most revolutionary change in our understanding of the dynamics of human behavior, the fourth cornerstone of modern psychiatry. It is impossible to overestimate the impact of psychoanalysis, not only on psychiatry itself but on medicine, the social sciences, literature, the fine arts, and even on our daily speech and thinking.

On these four cornerstones was built the structure from which developed not only the modern schools of psychotherapy but the somatic therapies as well.

THE SOMATIC THERAPIES

The discovery and application of the somatic therapies in the last three decades have constituted one of the most outstanding advances in the history of modern psychiatry. As we list them, it will be noted that each of these discoveries was made by a European investigator, then quickly imported to this country, where modifications and improvements were developed in each instance. Wagner von Jauregg, the Viennese psychiatrist who discovered the malarial therapy of general paresis in 1918, antedates the rest. Following this, the various shock therapies came to us in rapid succession. Insulin shock therapy was discovered by Dr. Manfred Sakel, an Austrian, in 1933; Metrazol® (Cardiazol®) shock therapy was discovered by

Dr. Ladislaus von Meduna of Budapest in 1935; electroshock therapy by Drs. Cerletti and Bini of Italy in 1938; prefrontal lobotomy was first performed by Egas Moniz of Lisbon in 1935. The value of chlorpromazine, the first of the tranquilizers, was discovered in 1953 by Deniker and DeLay of France. Two of the psychiatrists listed here (Wagner von Jauregg and Egas Moniz) were awarded the Nobel prize in medicine for their discoveries; they are the only psychiatrists in history to be so honored.

On reviewing the subsequent history of the somatic therapies in America over the passage of years one is impressed not only by those which are still being used but also by those which have been discarded. I am reminded of the anecdote attributed to the great French clinician Laennec, inventor of the stethoscope, who told his graduating class in the medical school: "Gentlemen, you are about to go out into the practice of medicine. To those of you who will have the good fortune to discover a cure for one of the many diseases which afflict mankind, I wish to give but one brief word of advice. USE THIS CURE AS OFTEN AS YOU CAN—WHILE IT STILL WORKS!"

Of the three shock therapies, introduced to America in the thirties, only electroshock therapy is now used to any extent. American refinements in the use of brief-acting anesthetics and intravenous muscle relaxants have removed many of the hazards and complications. It still remains the treatment of choice in the group of depressive reactions. Insulin therapy is still being used to a certain degree in Western Europe and the Soviet Union, but its effectiveness remains open to question. Psychosurgery, introduced to this country in 1936 by Freeman and Watts,[9] was extensively used for almost 20 years, until the advent of the tranquilizing drugs. Here again, this controversial procedure was refined and modified by many American workers and stimulated important research on frontal-lobe function.

The advent of the psychopharmaceuticals has probably stimulated the greatest amount of scientific and clinical research in psychiatry. The impact of these drugs on the American psychiatric scene is aptly described in "Action for Mental Health," the final report of the Joint Commission on Mental Illness and Health[10] publicly released a year ago:

> "These drugs have revolutionized the management of psychotic patients in American mental hospitals and probably deserve primary credit for reversal of the upward spiral of the state hospital inpatient load in the last four years. They have largely replaced the various forms of shock, as well as surgery on the prefrontal lobes of the brain (lobotomy). Unquestionably, the drugs have delivered the greatest blow for patient freedom, in terms of nonrestraint, since Pinel struck off the chains of the lunatics in the Paris asylums 168 years ago. The most noticeable effect of the drugs is to reduce the hospital ward noise level. Bedlam has been laid to rest. The debate still continues as to what precisely the drugs accomplish, physiologically and socially. Some have predicted they would empty mental hospitals, and others have dubbed them chemical strait-jackets. In the surprising, pleasant effects they produce on patient-staff relationships, the drugs might be described as moral treatment in pill form. . . ."

THE INFLUENCE OF PSYCHOANALYSIS ON AMERICAN PSYCHIATRY

It is far easier to describe Freud's influence than to explain it. To be sure, he offered an ingenious and highly appealing theory of personality structure and development, a carefully controlled system of training psychoanalysts, and a method of treatment in depth, the like of which the world had not seen before. As Fromm pointed out, one of the little noted contributions of psychoanalysis was that it made it emphatically clear that one human being was worthy of such lengthy and detailed attention by another human being, trained as an expert. Prior to the advent of psychoanalysis a person in trouble might consult a physician once or twice, or in exceptional cases a dozen times. But seeing the same doctor, week after week, month after month, and often year after year, for hundreds of hours was unheard of until psychoanalysts came into being. Many of Freud's ideas, including those on sexuality, had been known and discussed for hundreds of years. But it was Freud who had the genius to put these ideas together in highly articulate form as no one before him had been able to do. Indeed, Kazin[11] has suggested that the success of psychoanalysis might have been due in no small measure to Freud's brilliance as a creative writer.

It would take us too far afield to dwell at length on the early history of the psychoanalytic movement. However, several points germane to the present and future of American psychiatry require emphasis, especially those which have to do with the reception of psychoanalysis by medicine.

It is one of the intriguing ironies of history that Freud, who was deeply steeped in the organic medical sciences of the period, a man who had made important contributions to neuroanatomy, pharmacology and neurology, should have founded a school of thought which so disturbed the medical world that the further development of psychoanalytic organization and training had, perforce, to take place outside the established medical societies and universities. In America, psychoanalysis did not achieve academic respectability until the 1930's, when Franz Alexander, for a relatively short time, occupied the chair of psychoanalysis at the University of Chicago. In spite of sporadic efforts to integrate psychoanalytic education with the universities, most of the training has continued to the present day in separate psychoanalytic institutes.

Again, ironically, it was America's Clark University that invited Freud to deliver his historic lectures in 1909. Freud himself took a rather dim view of American culture and did not feel at home in it. But it was in America, and not in his native Austria, that Freud's psychoanalytic movement developed its largest and strongest following. Especially after World War II, when medical schools greatly expanded their psychiatric departments to keep pace with the increased interest in the field of emotional and mental disorders, psychoanalysis became predominant in the orientation of American psychotherapy. Today, it is a striking fact that over 50 per cent of the chairmen of departments of psychiatry in American medical schools are members of psychoanalytic societies, and most of the others are psychoanalytically oriented.

Success and acceptance, satisfying as they must have been, have brought serious problems in their wake. At the time Dr. White[2] delivered his Kober Lecture in 1929 80 per cent of the membership of the American Psychiatric Association were working in hospitals, whereas only 20 per cent were in private practice. Now the reverse is true. Eighty per cent are in private practice; only 20 per cent work in the overcrowded, understaffed mental hospitals. The fact must be squarely faced that the present-day undergraduate and graduate training tends to direct the young psychiatrist into the more remunerative, less arduous, and more prestigeful pastures of private practice and away from the rougher challenges of research and caring for seriously sick patients. The hard truth is that we are expending enormous effort, time, and money to train a highly specialized group of experts who will devote the bulk of their professional careers to a small group of highly selected private patients. It is a disturbing truth when we view it in relation to making more than a dent on the core problem of severe mental illness in America.

The very respectability which psychoanalysis has achieved as a professional way of life now attracts to it young men of quite a different stamp than was the case in the early twenties. In those days psychoanalysis was suspected and derided. To practice it was a risky way of earning a living. In spite of this, and possibly because of this, the early psychoanalysts were a gifted, daring, creative and dedicated group. They instilled a spirit of hope, enthusiasm, and scientific promise in an area which had become static, custodial, and stale. But how different today seem the bright young men who enter the field! They have only to complete their training—no small feat in itself—to be assured of instant security, automatic prestige, financial bounty, and a long waiting list of prospective patients. The course of training is hard, but the rewards are rich. And in the training process, can one doubt that the temptation is great to complete the requirements according to the book or to accept uncritically the methods and the manners of the master?

In his most recent book, "Persuasion and Healing," Dr. Jerome Frank[12] comments most penetratingly on this problem. He points out certain similarities between the psychoanalyst and the shaman or primitive healer, between the training of the psychoanalyst and the indoctrination process in communist thought reform. Frank writes:

> "There can be little doubt that the training analysis, regardless of its other effects . . . is a method of indoctrination. As a leading psychoanalyst (Glover) has written: 'It is scarcely to be expected that a student who has spent years under the artificial . . . conditions of a training analysis and whose professional career depends on overcoming "resistance" to the satisfaction of his training analyst, can be in a favorable position to defend his scientific integrity against the analyst's theory and practice . . . for according to his analyst, the candidate's objections to interpretations rate as resistance. In short, there is a tendency in the training situation to perpetuate error.' "

Frank goes on to state:

> "The analytic conceptual framework also has certain serious drawbacks from a research standpoint. Like all theories, it has fostered interest in certain areas at the expense of others that may be equally important. In particular, it has focused on psychological factors in mental illness to the relative neglect of biological assets and liabilities on a congenital or other basis. It has also stressed the role of personal life experience, especially in childhood, in molding personality, to the relative neglect of sociocultural forces. Finally, it has emphasized early life experience rather than current faulty interaction patterns as sources of difficulty. Modern analytic theory has endeavored to encompass the factors it initially neglected, but not being constructed to explain them, it has not dealt with many of them adequately.
>
> "The most serious drawback of analytic concepts, however, lies not in their content but in their formal characteristics. As attempts at inclusive formulations of all human thinking, feeling, and behavior, they have to be able to explain everything that happens. The validity of analytic hypotheses cannot be tested by making predictions from them and determining whether the predictions are confirmed. For no matter how the test comes out, analytic theory can explain the results. The type of imagination-catching, aesthetically appealing, all-inclusive conceptual scheme exemplified by psychoanalysis represents a necessary early step in the exploration of a new field. It directs attention to new data, shows their importance, and offers a framework for thinking about them. This type of theory, however, becomes a handicap at a later stage, and psychiatry today may be ready to move ahead to the formulation of more rigorous, experimentally testable hypotheses."

If psychiatry is to move ahead on many fronts it must train its young men to measure up to the medical and social needs of our time. Too many of our most gifted young analysts drift further and further from the main stream of medicine. They rarely visit our hospitals. Their neurology is forgotten. They take false pride in never prescribing a drug or taking a blood pressure. They seldom appear in court, even though they may have much to contribute to their patient's welfare and to the improvement of psychiatric expert testimony. They are often cavalier in their relations with their medical colleagues in the management of consultations and the writing of clinical reports. Although they may not be geographically isolated in the way which offended S. Weir Mitchell 68 years ago, many of them become just as isolated in a professional sense, and the baleful effect of this may be just as serious.

There is now a widespread discontent with the products of our training programs which is shared by psychoanalytic leaders themselves. It is significant that before this year is out the American Psychiatric Association with the Canadian Psychiatric Association will hold a major conference on this problem which, we are hopeful, will broaden the scientific foundations of psychiatric education and strengthen its social usefulness. There is not the slightest doubt in my mind that, in doing so, it will bring psychiatry in closer *rapprochement* with the main stream of medicine.

THE INFLUENCE OF AMERICAN PSYCHIATRY ON PSYCHOANALYSIS

To be historically accurate, the contributions of psychoanalysis to psychiatry (and vice versa) did not all occur in an atmosphere of sweetness and light. Bitter antagonisms developed between the two fields, some of which persist to the present day. Although admittedly anachronistic, these antagonisms have blinded scientific objectivity and delayed scientific progress on both sides. Braceland[13] described the situation well when he said:

> "Too long was orthodox psychiatry contemptuous of psychoanalysis, at high cost to itself and the patients who were its responsibility. Too long did psychoanalysis scorn the 'superficial' empiric methods of general psychiatry. These dogmatic points of view are now outmoded entirely. The part played by psychoanalysis in the amelioristic surge of psychiatry in the United States is clear. It has done much to change psychiatry from a descriptive, plodding discipline to a dynamic one prepared to uncover the forces that determine disturbed behavior and to manipulate them for therapeutic purposes. Psychoanalysis is now accepted and known for what it is. It is recognized as a method of investigation which has provided the deepest insight into the human psyche. Its enormous contribution is now acknowledged and it is time to abandon its state-of-siege mentality, which it retains, and take its part in hospitals and in universities. Its future lies in psychiatry and in the practice of medicine. It cannot escape the changes which are in store for all disciplines. No longer need it isolate itself, punish its heretics, or be suspicious of those who would question it. Its insights must be used for the benefit of that army of patients who cannot be treated by psychoanalysis, and who, indeed, are not suitable for treatment by this extremely specialized technique."

The fact of the matter is that many of the concepts of psychoanalysis have already lost their pristine identity and have become absorbed in the main body of psychiatry. So it is that many principles of psychoanalysis are now practiced daily but unwittingly even by psychiatrists who may call themselves "anti-analytic."

What is equally important but less well known are the contributions of psychiatry to psychoanalysis. This was, in fact, the title of a paper presented at the joint session of the Section on Psychoanalysis of the American Psychiatric Association and the American Psychoanalytic Association at its 1944 meeting by Dr. Leo Bartemeier,[14] long an advocate of closer *rapprochement* between psychiatry and medicine. It is in this field that the special genius of American psychiatry for modifying, streamlining, and adapting theoretical concepts for practical application stands out. The realities of World War II, with all the demands it made on trained personnel, made certain modifications imperative. Alexander's brief psychotherapy, group therapy, the influence of Sullivan and his theories, reduction of the frequency and duration of treatment, and a growing acceptance of psychoanalytically oriented psychotherapy were only a few of the products of this influence. Although many of the orthodox analysts regarded such changes as "dilutions" of their techniques, nonetheless it is quite obvious that American psychoanalysis–1962 bears little resemblance to psychoanalysis–1929. As Mora[15] points out, "We find increasing acknowledgment of the fact that psychotherapeutic results are strikingly similar regardless of the theoretical framework followed by each therapist, that the personality of the therapist is more important than his adherence to a particular school of thought, and that psychoanalytically oriented psychotherapists are qualified to treat the large variety of conditions that demand flexibility of approach, outside the rigid lines of the Freudian technique."

What has happened is that psychiatry and psychoanalysis have interacted with each other over the years to produce an amalgam which may have qualities superior to either of its ingredients. I feel strongly that this process will continue. It may well be that two decades hence psychoanalysis as we know it today will no longer exist; and improved methods, probably requiring less time, and capable of reaching more people, will be developed.

Research in Psychiatry

Despite the drawbacks of the "analytic conceptual framework" cited earlier by Frank, psychoanalytic methods remain of enormous importance in any significant research on human behavior. All our efforts to explain, explore and modify the bases of human behavior by either structural, physical or chemical methods will fail unless they include a systematic exploration of the personality. The futility of compartmentalizing and fragmenting our research on the brain and human behavior has been amusingly and perceptively exposed by Seymour Kety[16] in his delightful parable entitled "The True Nature of a Book" which I should like to present in condensed form.

In this parable Kety postulates a mythical country whose highly intelligent citizens have never seen a book. One day a million books appear on the scene. The mystified citizens decide to set up a special institute to study them and report back.

First the anatomists examine the books, and their report reads as follows: "The specimen is a roughly rectangular block of material covered ventrally and dorsally with two coarse fibrous encapsulated laminae, approximately 3 mm. thick. Between these lie several hundred white lamellae, a fraction of a millimeter thick, all fastened at one end and mobile at the other. On closer inspection these are found to contain a large number of black surface markings arranged in linear groupings in a highly complex manner."

Then the chemists have a try at it. They begin, of course, by burning the book, reducing it to an ash, and computing the energy released per gram.

Then the biochemists arrive. They slice the book, mince it up, and homogenize it. Then they centrifuge it to remove the black contaminants.

The molecular biologist next appears. He uses the techniques of extraction, centrifugation, electrophoresis, hydrolysis, repolymerization, and comes out with a macromolecular model closely resembling cellulose.

Next the physiologists approach the problem. They riffle the pages, set up complex equations to describe it, insert electrodes, make oscillographic tracings, feed them into computers, and come up on one occasion with the extra-ordinary finding of the word "THE."

Then the behavioral scientists arrive. They begin to count the number of letters in the words, find a preponderance of four-letter words, and decide that it is a modern novel which will become a best seller and will be banned by the Postmaster General. They also study the various classes of books and their impact on the community, but they do not learn much about the individual book.

"Finally," and I quote from Kety, "the book is brought in desperation to the psychoanalyst in the hope that he will be able to read it. That he does not do precisely, but instead asks the author to select portions and read them while he listens. Of course, the author is biased and reads what he wants to read or, if there is 'good transference,' those passages which he thinks the analyst would like to hear. And the analyst himself doesn't always hear with equal acuity, but, depending on his school or on his preconceived notions, is deaf to greater or lesser portions of the data.

"Nonetheless, this anecdotal, biased and selected patchwork may be the closest approximation which we have to the rich and almost inexhaustible fund of information which reposes in the individual's human brain and to a significant extent, determines individual behavior."

AMERICAN PSYCHIATRY, AMERICAN ATTITUDES, AND THE LAW

Reference has already been made to the change in public attitude toward the mentally ill which began to take place in America after 1850. For the two decades prior to this, during the period when "moral treatment" was at its height, it was a relatively easy matter to persuade most patients to enter a psychiatric hospital voluntarily. In other cases the recommendation of a physician was quite enough authority, and commitment, informal as it was in those days, could be accomplished with the greatest of ease. There were no laws governing commitment procedures until the second quarter of the 19th century.

Several factors conspired to bring about serious and unfortunate changes in the public attitude which have persisted to the present day. First, the rise of the large state hospitals, inspired largely by the crusade of Dorothea Dix, enabled the county jails and poorhouses to transfer their luckless charges to the new and more spacious quarters supported by the state. Thus the new hospitals soon became loaded with chronic patients who had a poor outlook for recovery. Second, the wave of immigration which followed the famines in Europe, in 1845–48, brought with it thousands of the underprivileged, some of whom ultimately required state hospital treatment. The resentment of the established well-to-do citizenry was reflected in their description of these unfortunates as "the foreign pauper insane." To this day our state hospital system has never recovered from this original overcrowding, and its facilities have never kept abreast of continued population growth. A third factor was the swing of the pendulum from the optimistic cult of curability to the equally pessimistic cult of incurability. Men like John P. Gray led the movement which came to look upon mental illness as "brain disease, and hence incurable."[6]

A final factor in changing the attitude of the public was a series of notorious cases of alleged illegal commitments which were brought to the attention of the American public.[4] The series began with the Josiah Oakes case in 1845 and the Hinchman case in 1849 and ended with the famous Mrs. E. P. W. Packard case in 1860. The last named case is the most famous and probably the most important, because Mrs. Packard kept her case before the public for seven full years, wrote several books, based on her "railroading" (a term which she popularized), lectured extensively, and was responsible for the enactment of rigid commitment laws in three states and for influencing the commitment laws in many others. Mrs. Packard was the wife of an Illinois clergyman who was committed in 1860 under the very loose and unjust Illinois statute in which married women could be "entered or detained" in a mental hospital at the request of the husband. There are records to indicate that Mrs. Packard had been a mental patient at the Worcester State Hospital as a girl and that she had numerous delusions in which she felt that she was the third person in the Holy Trinity and the mother of Jesus Christ. Deutsch, however, remains undecided as to her mental condition at the time of her commitment because of her intelligence, vigor and ability manifested in her crusade following her discharge from the Jacksonville State Hospital in 1863. (It should be noted parenthetically that intelligence and zeal are not incompatible with a full-blown paranoid state.) At any rate, we owe our dubious thanks to Mrs. Packard for the barbaric system of mandatory jury trials which became law in many of our states as a result of her efforts. Thus did the misdirected zeal of a crusader set the clock back many years.

It is quite obvious that one way to correct the situation would be to enact a series of uniform, enlightened and humanitarian laws throughout our 50 states. The basic components of such laws were eloquently stated almost one hundred years ago in 1869 by Dr. Isaac Ray,[17] one of the truly great American psychiatrists of the 19th century. He stated that any law governing the admission of mental patients to a hospital should:

> "In the first place put no hindrance in the way to prompt use of those instrumentalities which are regarded as the most effectual in promoting the comfort and restoration of the patient. Secondly, it should spare all unnecessary exposure of private troubles and all unnecessary conflict with popular prejudices. Thirdly, it should protect individuals from wrongful imprisonment. It would be objection enough to any legal provision that it failed to secure these objects in the completest possible manner."

It is a curious commentary on man's resistance to change that we have not to this day been able to meet Dr. Ray's criteria, but the effort still goes on.

Another way to eliminate the pain, humiliation and other evils of commitment procedures would be to make the greatest possible provision for voluntary admission to mental hospitals. But it was not until 1881 that the first voluntary admission law was enacted in Massachusetts. The idea gained momentum very slowly. By 1924 only 28 states had some provision for voluntary admissions. It is interesting to observe that Dr. Kober,[18] who had so much to say on a wide variety of subjects, made some searching comments on this topic in 1916 when he was discussing a paper at the Medical Society delivered by Mr. Fenning, a prominent attorney and close friend of Dr. White. In the discussion which followed Dr. Kober inquired regarding a pending bill in Congress which would provide for voluntary commitment. The remainder of his discussion has been preserved for us in the WASHINGTON MEDICAL ANNALS and is worth quoting here:

> "He [Dr. Kober] felt that such a provision [voluntary commitment] is of the utmost importance; very many need to take advantage of such a means of securing treatment of threatening mental disease, and many would embrace such an opportunity. The voluntary commitment is a most valuable preventive measure for incipient cases of mental disease; indeed, the straw that breaks the camel's back in many of these cases is the strain involved in appearing in court for legal commitment. He urged that members of both the legal and medical profession make good use of any opportunity to bring about the enactment of this bill. There are many persons predisposed to mental disorder who can be saved from a final breakdown by prompt treatment in a properly equipped hospital. When we consider that the District maintains from 1,500 to 1,600 inmates at the Government hospital at an annual cost of over $375,000 [How times have changed!], there appears to be an important economic reason to add to the humanitarian reasons for providing for the prevention of insanity."

Unfortunately, the measure of 1916 to which Dr. Kober referred failed to pass, and it was not until 1948, through the efforts of Dr. Winfred Overholser, Superintendent of St. Elizabeths Hospital, that the present law providing for voluntary admission in the District of Columbia was enacted.

At present all 50 states, with the notable exception of Alabama, have provision for voluntary admission. Yet only 10 to 15 per cent of the mentally ill in America take advantage of it. This is in striking contrast to the situation in Europe and especially in England, where 80 per cent of mental patients enter voluntarily.

Why should this great discrepancy exist? Are Europeans so much more trusting and Americans so much more distrustful about entering a mental hospital? Are American mental institutions so forbidding that they strike terror into the hearts of would-be patients? Do overcrowding and understaffing prevent mental hospitals from encouraging this type of admission? Are the present procedures for voluntary admissions still too cumbersome to be effective? Are the statutes which provide for voluntary admission insufficiently explicit to assure the would-be patient that his rights will be protected? Is the American public inadequately informed as to the advantages of voluntary hospitalization? Does the rising cost of psychiatric treatment prevent further expansion of this form of admission? Will increased budgets for the state hospitals be sufficient, or will it also be necessary to reorient psychiatrists, administrators, and hospital staffs? Will the establishment of separate services for voluntary admissions succeed in removing some of the resistance which is still felt about entering a mental hospital?

The answers to these and related questions are of the greatest importance to the future of American psychiatry. The entire blame for our sorry state cannot be placed at the doorstep of the lawyers, the legislators, or the insensitive public. We, as psychiatrists, and members of the medical profession must accept our full share of the responsibility.

THE OUTLOOK FOR AMERICAN PSYCHIATRY

Having outlined some of the trends which have helped shape American psychiatry I can perhaps be permitted to indulge in a bit of forecasting.

Our native genius for borrowing, testing, improving, and adapting the therapeutic ideas of other countries will continue. But out of the melting pot that is America will come sturdier alloys uniquely suited to our needs.

We have seen psychiatry come out of its geographical and professional isolation and move back into the main stream of American medicine. The increasing number of psychiatric units in general hospitals is but one of the many indications that this trend will continue.

We have seen our public mental hospitals start out as primitive cells, develop into excellent therapeutic instruments during the moral treatment period, deteriorate with neglect, and finally succumb to the American disease of bigness. We are beginning to see that there is something dehumanizing, almost anti-psychiatric, about the colossal "tenements of the mad" which we have constructed. The public mental hospital of the future will be a small one approximating the 1,000-bed size suggested by "Action for Mental Health."[10] It will have the closest ties with a network of community outpatient facilities.

If American psychiatry and American medicine will be vocal enough and insistent enough, they will be able to persuade our legislators to follow Dr. Ray's suggestions of 100 years ago and enact laws which will permit the mentally ill to enter our hospitals promptly without humiliation or harm.

As for psychoanalysis, its theoretical conceptions may be expected to meld into the main stream of psychiatry's intellectual history. As a treatment method its classical forms will continue to be of limited application. Freud[19] was right when he predicted that: "The future will probably attribute far greater importance to psychoanalysis as the science of the unconscious than as a therapeutic procedure."

The biological underpinnings of psychiatry which began to make themselves felt late in the 19th century are now moving full-steam ahead on the neurophysiologic, molecular and neurochemical fronts. Here again, Freud[20] was prophetic when he said: "All our tentative psychologic formulations (*psychologische Vorläufigheiten*) will have ultimately to be grounded in the organic." Although no break-through is yet in sight, the money and resources are now becoming available to work toward one. In the meantime the somatic therapies which have proved so useful will continue to be refined and new ones developed.

Fortunately, there are even other encouraging portents in the sky. The stirring report of the Joint Commission on Mental Illness and Health ("Action for Mental Health"),[10] has given fresh stimulus to forward movement in research, treatment, and training. The forthcoming American Medical Association Congress on Mental Health indicates clearly that organized medicine is prepared to lend its strong right arm to a task which it has neglected for many years. Discontent with the effects of overspecialization and parochialism in psychiatric training will bring forth curricular changes bearing promise of a more useful social product. The psychiatrist of the future will not remain a doctor of medicine in name only.

From a practical point of view, our immediate future course lies in a Nationwide elaboration of community psychiatry. The American psychiatry of the future will encompass many of the overtones of the "moral treatment" of the 19th century, clothed in the modern dress of the open hospital, the therapeutic community, psychiatric units of general hospitals, day and night hospitals, and related community facilities. Inherent in this great effort will be the ever-increasing use of large numbers of nonmedical personnel, such as psychologists, social workers, nurses, administrators, ministers, and lay therapists. To some this may pose a serious threat to the integrity of psychiatry as an important part of medicine. However, the task is far too great and far too important to be accomplished by any single discipline. The challenge is clear. We must mobilize a total effort, interdisciplinary in nature but medical in its direction. To this end it will be more important than ever for the American psychiatry of the future to remain an integral part of American medicine. For it is the essential harmony between psychiatry and medicine that offers the best promise of scientific progress against the mental illnesses of our time.

REFERENCES

1. Kober, G. M.: Washington Med. Ann., 1916, **15**, 342.
2. White, W. A.: AMA Arch. Neurol. & Psychiat., 1929, **22**, 873.
3. Hall, J. K., Zilboorg, G., and Bunker, H. A., editors: One Hundred Years of American Psychiatry. New York: Columbia, 1944.
4. Deutsch, A.: The Mentally Ill in America. New York: Columbia, 1946.
5. Mitchell, S. W.: Proc. 50th Annual Meeting of American Medico-Psychological Association (now the American Psychiatric Association) in Philadelphia, May 1894.
6. Lewis, N. D. C., in Arieti, S., editor: American Handbook of Psychiatry. New York: Basic Books, 1959, chap. I.
7. Thorndike, E. L.: Animal Intelligence; an Experimental Study of the Associated Processes in Animals. New York: Macmillan, 1898.
8. Pavlov, I. P.: Lectures in Conditioned Reflexes. New York: Liveright, 1928, pp. 39–40.
9. Freeman, W., and Watts, J. W.: Med. Ann. D. C., 1936, **5**, 326.
10. Joint Commission on Mental Illness And Health: Action for Mental Health. New York: Basic Books, 1961.
11. Kazin, A.: The Atlantic Monthly, 1961, **208**, 73.
12. Frank, J.: Persuasion and Healing. Baltimore: Johns Hopkins, 1961, p. 124.
13. Braceland, F. J.: Psychiatry—Some Reflections on Its Future, delivered before Section on Nervous and Mental Diseases of the American Medical Association in Atlantic City, N. J., June 10, 1959.
14. Bartemeier, L. H.: Amer. J. Psychiat., 1944, **101**, 205.
15. Mora, G., in American Handbook of Psychiatry. See ref. 6, p. 32.
16. Kety, S.: Science, 1960, **132**, 1861.
17. Ray, I.: 3 American Law Review 193 (1869).
18. Kober, G. M.: Washington Med. Ann., 1916, **15**, 117.
19. Freud, S., under "Psychoanalysis, Freudian School" (ca. 1925) in Encyclopaedia Britannica, 14th ed., 1938.
20. Freud, S.: Narcissism: an introduction (1914), in Collected Papers. New York: Basic Books, 1958.

Acute Renal Failure

RAFAL A. FALKIEWICZ, M.D.[*]
Chief Surgical Resident, Sibley Memorial Hospital, Washington

ACUTE RENAL FAILURE may be described as a clinical state in which a physiologic derangement exists which is characterized by oliguria in the absence of shock, the oliguria being a result of renal tubular damage and leading to the retention of toxic metabolites and electrolytes, which, by their accumulation, may produce death. In this paper, the entire syndrome will be referred to as acute tubular necrosis, and this will be used interchangeably with acute renal failure.

Acute tubular necrosis may follow: (a) obstetrical accidents, (b) major surgery, (c) crush injuries and severe trauma, (d) nephrotoxic insults, (e) incompatible blood transfusions, (f) infectious shock, and (g) severe burns.

No single factor appears to be directly responsible, but a glance at the list of predisposing causes, above, reveals the setting in which the lesion develops. First and foremost is decreased blood volume; this may result from either total hemorrhage or plasma loss, as in burns. Hypovolemia leads to decreased glomerular filtration, and the lower renal perfusion pressure leads to tubular anoxia. By itself, anoxia does not produce acute renal failure. Although the kidney is a very demanding organ, accustomed to 20 per cent of the cardiac output and poorly equipped to deoxygenate blood, it withstands up to 45 minutes of severe anoxia unscathed.[1] It appears that a combination of damaging influences may be required before acute tubular necrosis develops, as will be seen more clearly below.

Tubular anoxia is not always directly produced by low blood volume. It may derive from renal vasoconstriction; the arteriole supplying the tubules, being the efferent arteriole flowing from the glomerulus, prerenal vasoconstriction effects are magnified at this level. Vasoconstriction may occur directly from the presence of toxin; e.g., irreversible shock may be prevented by applying a tourniquet to the proximal aspect of a crushed limb, preventing the entry of the "crush endotoxin" (which causes renal vasoconstriction) into the circulation.[2] Perfusion of the limb after application of a tourniquet enhances this beneficial effect. In severe transfusion reaction a vasoconstrictor substance may be liberated. An afibrinogenemia present in these cases implies that intravascular clotting with massive fibrin deposition may precipitate vasoconstriction, which enhances the effect of the already present heme in the glomerulus, coupled with blockage of the smaller vessels with fibrin.[3, 4, 5] The kidney can excrete large quantities of bile and other heme pigments, i.e., hemoglobin, myoglobin, and methemalbumin as long as no other pathology exists. Similarly, exotoxins such as sulfonamides, etc. can be handled by a normal kidney. As specified above, renal anoxia can be tolerated for a long time without irreversible tubular damage. It becomes clear, then, that in the majority of victims only a combination of these two factors (anoxia and nephrotoxin) or the concomitant presence of preëxisting renal disease with one of them leads to acute tubular necrosis. It should, however, be noted that cases of acute tubular necrosis following "medical" shock and instances of acute tubular necrosis following exogenous toxins with previously normal kidneys have been reported, but these generally constitute a minority.

---

[*] Formerly Senior Assistant Resident, Georgetown University Hospital, Washington, D. C.

NOTES ON THE VARIOUS CLINICAL SYNDROMES ASSOCIATED WITH ACUTE TUBULAR NECROSIS

A. *Obstetrical accidents.* Acute renal failure accounts for six per cent of all maternal deaths. Twenty-five per cent of patients reaching artificial kidney centers belong in this category.[6]

B. *Major surgery.* The important feature here is blood loss. Certain factors complicate the situation in surgical patients and become additive to the blood loss:

1. Preëxisting renal disease.
2. Dehydration with preëxisting desalting water losses and sequestered edemas, e.g., intestinal obstruction, regional ileitis (enteritis), ulcerative colitis, malfunctioning ileostomy, and pancreatic fistula.[7]
3. Anesthetic agents; some produce transient depression of the volume of glomerular filtrate.
4. Frank shock—bacteremia and septicemia as seen in peritonitis or fulminating systemic infections originating from the genitourinary tract.

C. *Crush injuries.* Studies of air-raid victims during World War II have elucidated to a very large extent the spectrum of severe muscle crushing trauma and associated mortality.[8] Acute tubular necrosis which develops in the "crush syndrome" was seen to derive from a specific endotoxin plus a massive liberation of myoglobin and free hemoglobin into the blood stream on the background of acute shock from blood or plasma loss.

D. *Nephrotoxic insults.* These include sulfonamides, heavy metals (especially mercurials), carbon tetrachloride, ethylene glycol, etc. (nephrotoxic nephritis), bacterial products, allergens (nephrotoxins of anaphylaxis), and heme pigments from hemolysis in large quantities (tubulorrhexis). A patient in shock with blood pigments in his urine presents a significant possibility of developing acute renal failure. In children exogenous toxins account for the second highest mortality (statistically) from renal causes, the first being acute glomerulonephritis.

E. *Incompatible blood transfusions.* Massive intravascular hemolysis frequently superimposed on a hypovolemic system leads to renal failure.

F. *Severe burns.* A combination of plasma loss, hemoglobinemia, and hemoglobinuria is present. Ten to 20 per cent of erythrocytes may be destroyed in a severe burn. The extent of hemolysis is proportional to the temperature developed at the burn site and length of exposure. Between 51° and 65°C spherocytosis develops; with increasing temperature hemolysis develops.

PATHOLOGY OF ACUTE RENAL FAILURE

The underlying lesion is cell necrosis of the tubular epithelium (acute tubular necrosis). In lesions associated with toxin the basement membrane remains intact. Ischemia produces complete disruption of tubules with dissolution of the basement membrane. This is prognostically the less favorable lesion.[9] The concept of "a few good nephrons" is now generally accepted; i.e., the histologic picture of the kidney reveals a certain number of normal tubules in an environment of completely destroyed tubules rather than, as was formally held, a general uneven damage of the entire renal parenchyma. Two ideas which at this time remain in the hypothetical stage may be mentioned—interstitial edema and tubular back diffusion, although the former is probably not a factor (Strauss[10]).

DIAGNOSIS

Acute renal failure should be strongly suspected if a patient who, having weathered the insults of hemorrhage or an incompatible blood transfusion, now stabilizes clinically; i.e., there is a return of blood pressure and pulse to normal, skin temperature and color improve, and the sensorium clears, but in whom there is no corresponding increase in urine volume. In short, the patient continues to pass only minimal quantities of urine, e.g., 100–300 ml. per 24 hours in spite of a clinical picture strongly suggestive of the return to normal of renal perfusion pressure. At the same time there is elevation of blood urea nitrogen and a rise in potassium. The differential diagnosis involves a consideration of two main entities, obstructive uropathy and dehydration. Anuria, not oliguria, characterizes obstructive uropathy, and anuria almost never occurs in acute tubular necrosis for any length of time. It occurs as a transient phenomenon. If anuria persists one must consider stones, tumor, bilateral renal artery thrombosis, and occlusion of the aorta. A retrograde pyelogram must then be done. Examination of the urinary sediment reveals the presence of renal tubular epithelial cells to suggest acute tubular necrosis and, in specific states in which the history may be helpful, myoglobin and pigmented casts (crush injury) or hemoglobin (transfusion reaction) are present. Serum lactic dehydrogenase becomes elevated in acute tubular necrosis but not in obstructive uropathy or dehydration. Dehydration may be suggested by history and clinical appearance. Frequently the problem of whether acute renal failure exists or whether there is an extracellular fluid deficit causing oliguria without tubular damage is difficult to solve. One may have physiologic oliguria with a specific gravity low or high on restricted water alone or together with solute restriction, e.g., after surgery. Normally, urea is the major contributor to urine osmolarity because sodium reabsorption tends to be complete. In acute tubular necrosis urine osmolarity approaches plasma values. Low urea and high sodium in the urine suggest acute tubular necrosis; small urine volume with a high specific gravity of 1.030 to 1.040 suggests dehydration with normal tubules. Finally, weighing the patient will frequently aid in eliminating dehydration since most patients with acute tubular necrosis when first seen are in positive water balance/body weight.

If the diagnosis remains doubtful the infusion test is used. This involves an infusion of an appropriate fluid to restore a deficiency if such exists and thereby correct the oliguria. Obviously, in acute renal failure no diuresis will be achieved, and this will point to the diagnosis. The risk of overhydration is not great, but it does exist and must be kept in mind. It is, however, worth taking, and subsequent management is largely dependent on the outcome of this test.

In a 70 Kg. adult a volume of approximately 700 to 1,000 ml. is infused over a period of 40 minutes to one hour. This represents 1 to 1.5 per cent of body weight or 20 per cent of blood volume. In burns and peritonitis the appropriate fluid is plasma, dextran, or 5 per cent albumin. In crush wounds or hemorrhage it is whole blood. In desalting loss, saline and lactate is used; in desalting water loss with subtraction acidosis, lactate, and in desiccation, 5 per cent dextrose in water.

Management in Acute Renal Failure

When the diagnosis of acute renal failure is established the patient is managed within a wide spectrum of derangements, both already manifest and those which must be prevented. These encompass the following:

1. Maintenance of fluid balance and provision of adequate calories to minimize protein catabolism
2. Correction of electrolyte imbalance
3. Prophylaxis and treatment of infections
4. Therapy of hematologic abnormalities
5. Management of cardiovascular complications
6. Early recognition and treatment of miscellaneous complications
7. Artificial dialysis.

Fluid and Calories

Initially the patient's present state of hydration is determined. The usual clinical signs of skin turgor and mucosal surface moisture aided by the hematocrit and occasionally blood volume determinations are employed. The patient is weighed. Fluid requirement is assessed on a scale of 0.3 ml. per Kg. per hour, the average being 500 to 800 ml. daily. In infants, 0.5 to 1.0 ml. per Kg. per hour is given. The patient's endogenous water formation from the breakdown of protein, glucose and fat, together with the release of preformed water amounts to approximately 400 ml. daily, and this must be subtracted from his insensible loss when calculating 24-hour fluid requirements. Gastrointestinal and urinary losses are replaced volume by volume. In the presence of fever more water is required. A weight loss of 0.1 to 0.5 Kg. per day is satisfactory and indicates proper balance. The patient's caloric intake should, if possible, be administered by mouth. Glucose and fat may be given by gastric tube in the form of a drip, providing the required number of calories in a safe volume of solvent. If, as is frequently the case, gastric feedings are not tolerated, parenteral alimentation becomes necessary. Moore[7] recommends a polyethylene catheter in the superior vena cava for this purpose. Recent studies[11] reveal that 100 Gm. of carbohydrate daily has the maximum protein-sparing effect. Various techniques are employed, the usual being 50 per cent dextrose by slow drip of 25 to 30 ml. per hour or 10 per cent dextrose when a larger volume is allowed. Lipomul®, which yields 755 calories per unit, may be given in combination with 50 per cent dextrose; pure fat, however, should not be used to meet the entire caloric requirement, which is approximately 2,000 calories daily (more in the presence of fever), since it may produce ketosis. Furthermore, fat has probably no protein-sparing effect, and a negative nitrogen balance is not corrected.

The use of testosterone or Nilevar® is suggested for the anabolic activity. Insulin (crystalline) one unit for 2 to 3 Gm. of glucose is added to the infusion to enhance the effect of glucose in controlling extracellular potassium shifts. Finally, to prevent clotting in the catheter, heparin is used in the infusion, 1,000 units for each 500 ml. of 50 per cent glucose being the accepted dose.

Electrolytes

The following electrolyte abnormalities are seen: hyperkalemia, hyponatremia, acidosis, hyperphosphatemia and hypersulfatemia, hypocalcemia, and hypermagnesemia. Hyperkalemia, hyponatremia and acidosis form the lethal triad. Metabolic acidosis elevates potassium and potentiates its cardiotoxic effects, and hyponatremia (often dilutional) also aggravates the cardiotoxicity of increased potassium. Potassium begins to rise early, and after the third day potassium toxicity is the commonest cause of death in acute renal failure. Obviously, no potassium must be administered parenterally, a fact which may be overlooked in the treatment of infections with penicillin or when the potassium salt is used; e.g., 1,000,000 units of potassium salt contains 1.66 mEq. of potassium and 50,000,000 units, 83 mEq. potassium, an appreciable amount. Furthermore, early débridement of necrotic tissue minimizes potassium accumulation[12]; one liter of intracellular water contains approximately 160 mEq. of potassium and one liter of red blood cells, 100 mEq. potassium. Both hyponatremia and hypotonicity interfere with normal brain function and are important factors in the coma of uremia. Careful sodium replacement is mandatory in this deficiency. Acidosis is secondary to the retention of hydrogen ion, which is not excreted. Treatment is necessary only if profound, and then sodium lactate or calcium gluconate with sodium bicarbonate (given separately to avoid precipitation of calcium ions in an alkaline medium) may be used. Administration of sodium bicarbonate will be associated with the loss of the chloride ion, and this will be tolerated to the level of approximately 70 mEq./L of serum chloride without the necessity of replacement of the chloride ion. Tetany may occur in the uremic patient if sodium bicarbonate is given too rapidly (sodium lactate is preferable in nonemergency situations because it exerts its effects more slowly).[13] Hyperphosphatemia and hypersulfatemia are part of the uremic picture. They reflect the concomitant retention of hydrogen ions but do not contribute to the acidosis. Of major significance is the finding of increasing phosphorus out of proportion to the products of nitrogen metabolism; this indicates a mass of necrotic tissue and is a strong indication for a search and immediate débridement. Reduction in protein catabolism minimizes the retention of both these anions.

INFECTION

Inasmuch as the outstanding lethal complication was formerly overhydration, iatrogenically produced through the lack of understanding of the disease, today sepsis constitutes the gravest danger to the patient. All necrotic tissue must be débrided and a watch kept for signs of infection, systemic or localized. Antibiotic prophylaxis is not advocated, and when antibiotics are used advisedly the dosage should be modified out of respect for the absence of renal clearance. Furthermore, nephrotoxic drugs such as kanamycin, polymyxin, neomycin, bacitracin and colimycin are contraindicated, and if absolutely necessary should be employed with extreme caution. Prevention is of major significance and can best be achieved by correct technique in procedures such as the introduction of intravenous catheters and needles, intramuscular medication, pulmonary toilet, wound dressings, and urinary catheters.

HEMATOLOGIC ABNORMALITIES

These include anemia and a bleeding tendency. Anemia develops as a result of the inhibition of the production of the erythropoietic factor, which occurs as a sequence of the metabolic changes in the uremic syndrome. There is an increase in the destruction of erythrocytes without a corresponding marrow erythroid hyperplasia. Another possible cause is the production of an erythropoietin by the kidney in acute renal failure. As a rule, the anemia is well tolerated. A bleeding tendency develops in the chronic form of renal failure as a result of platelet dysfunction.[14]

CARDIOVASCULAR SYSTEM

Congestive heart failure is a complication of major significance. It is most frequently iatrogenic and requires skilled treatment in the presence of acute renal failure. Digitalis and allied drugs must be given in reduced dosage; the amount of digitalis necessary is uncertain. Diuretics are dangerous. Sedatives and narcotics are contraindicated. Again, prevention is the aim, and frequent venous pressure determinations during the period of fluid replacement of the oliguric and later the diuretic phase, when zealous replacement may contribute to failure, constitute the best and most reliable clinical safeguards. The electrocardiogram changes which reflect hyperkalemic cardiotoxicity include elevation of T waves and depression of the S-T segment early (with prolongation of the QRS and TR intervals). Bradycardia, ventricular tachycardia, and other arrythmias are seen. Ventricular asystole is a terminal event.

MISCELLANEOUS COMPLICATIONS

These include hemorrhage, which should be prevented by minimizing trauma and when necessitating treatment can be managed with fresh blood or platelet transfusions, parotitis, and cholecystitis (rarely), usually in old patients as the result of decreased fluid intake.

RESINS AND DIALYSIS

Resins may be used orally or per rectum; 30 to 50 Gm. of the ammonium form of a carboxylic cation exchange resin given every two hours via gastric tube or by retention enema may result in a loss of as much as 220 mEq. potassium daily in the stool. Resins are useful after dialysis to maintain the postdialysis level of potassium. In severe injury resins should be started early in anticipation of a fairly rapid elevation of serum potassium.

A detailed discussion of the use of the artificial kidney[15, 16, 17] falls beyond the scope of this paper; suffice it to say that it constitutes the most efficient treatment, being superior to other forms of dialysis, e.g., peritoneal and intestinal.[18] It is of value in all early cases and in those cases in which an attempt at correction of fluid volume and serum electrolytes has been made and failed and the patient's physical condition permits travel.

Indications for dialysis are:

1. Progressive elevation of potassium with electrocardiographic changes.

2. Severe acidosis with lowered sodium. Acidosis must be corrected, otherwise the lowering of potassium would be only temporarily beneficial. Dialysis corrects acidosis.

3. Clinically progressive uremia as evidenced by progressive mental symptoms—listlessness, dizziness, nausea and vomiting, neurologic disturbances, etc.

4. Chemical azotemia alone in an oliguric patient.

SPECIFIC PROBLEMS ARISING IN SURGICAL PATIENTS

Wound healing is delayed in these patients, and the incidence of dehiscence is greater (Stein and Wiersum[19]). For this reason stitches should be removed later, and wire with through-and-through closure is recommended in patients who might develop renal failure postoperatively. Avoidance of compound gastrointestinal anastomoses in favor of exteriorization and drainage procedures when possible is preferable, and again wire is preferable to silk. Patients with severe burns require especially strict isolation techniques and prompt therapy of infections and superinfections in the burn areas and cut-down sites. Judicious use and protection of veins is necessary. The fate of skin grafts is variable, but generally the incidence of extensive sloughing is higher. In severe muscle trauma complete débridement and wide open drainage are necessary. Gas gangrene is a dreaded complication and can be effectively avoided only by eliminating deep-seated necrosis. Patients with intestinal or pancreatic fistulae require careful skin protection. The electrolyte problem here is severely compounded, and careful estimations of losses must be made; these should be returned into the alimentary tract on an aliquot basis when possible. Daily weights are especially important in these cases. Regional hypothermia is a useful adjunct to the management of patients with peritonitis and sepsis, but no definite recommendations can be made, since this work is still in progress at several clinics. Beneficial results up to date have not been uniform; since deleterious effects from hypothermia have not been seen, a trial is warranted. It would appear that immersion or external hypothermia is limited mainly by the body core/skin temperature gradient, and lower temperatures than those obtainable may be required. Patients with acute renal failure requiring primary surgery should be considered for hypothermia during surgery.

SUMMARY

Acute renal failure is a very grave medical situation. The patient's course is highly unpredictable and depends on several factors, principally the severity and nature of the original insult, the presence or absence of preëxisting renal disease, and the skill of management, including facilities. Early recognition of infections and immediate surgical intervention are indicated. This applies, above all, to post-traumatic cases, which are more serious and in which infection accounted for 45 per cent of deaths in a series collected during World War II (Balch et al[20]). Patients with acute renal failure tolerate surgery and must never be denied this advantage.

Accurate fluid and electrolyte balance management, rational fulfillment of caloric needs, the use of resins, and hemodialysis constitute the mainstay of the metabolic part of treatment. Prevention and treatment of complications form the other general part of the total management with special emphasis on the maintenance of a clear airway and prevention of atelectasis, since this will superimpose fatal respiratory acidosis on renal acidosis. When respiratory compensation fails the field is set for hypotension and cardiac arrhythmias.

Comments have been made on some of the

(*Continued on page 435*)

Procaine as an Antibiotic and Antifungal Agent

JOHN D. FOLEY, M.D.
Washington

An investigation of the action of procaine on bacteria and fungi was prompted by a review of thousands of injections of procaine under adverse conditions and in no instance did infection develop.

While checking procedures of office hypodermic injections, necessitated by an occurrence of three abscesses within a short period, it was noted that in no instance was procaine involved. Reviewing the very numerous injections given since 1939, many under field conditions, for muscle strains, sprains, bursitis and contusions, no instance of infection was noted, although sterile procedure was hurried and personnel relatively untrained.

In view of this circumstance an investigation was made of the bactericidal, bacteriostatic, fungicidal, and fungistatic properties of procaine solution in various strengths from 0.5, 1.5, 2, 2.5 to 5 per cent with the standard test setup of 22 organisms.

The uses of procaine other than a local anesthetic are numerous. It is a diethylaminoethyl-p-aminobenzoate and belongs to the alkamine ester group of compounds, all members of which possess activities similar to atropine, quinidine, and curare and are anticholinergic, antihistaminic, and anesthetic. Its uses have been varied:

Control of cardiac arrhythmias.

Alleviation of pruritus, urticaria, and status asthmaticus.

Aid in circulatory conditions, including coronary occlusion, pulmonary embolism, Buerger's disease, Raynaud's syndrome, and vasomotor spasms.

A blocking agent in the face of impending gangrene.

Many allergic manifestations and the various conditions affecting muscles, bone and cartilage.

Following administration of procaine by injection it is hydrolyzed rapidly by plasma procaine esterase and a hepatic enzyme with the formation of para-aminobenzoic acid and diethylamino-ethanol. Neither possesses the properties of procaine, and in large doses complete elimination from the blood stream occurs within 20 minutes. Amounts up to 10 Gm. a day are tolerated if given slowly in dilute intravenous infusions.

Much publicity has been given to the claims of Professor Aslan and colleagues concerning procaine injections in hypertension, cardiac ischemia, anorexia, gastric ulcers, cerebral arteriosclerosis, Parkinson's disease, deafness, and rejuvenation. The treatment consists of 5 ml. of 2 per cent solution of procaine at a pH between 4.2 and 5.0 three times a week for four weeks followed by repeated courses after a ten-day interval. Considering the rapidity of hydrolysis with the formation of two end-products, neither of which affects the results obtained by procaine, it is rather difficult to understand the system of administration and the results claimed. The opinion held by British physicians is that any good results would be obtained only by continuous intravenous infusion for a prolonged period.

The report of the investigation of Macht and associates[1] indicated an absence of antiseptic properties. Their objective was to obtain a local anesthetic with antiseptic properties for urologic procedures involving urethra, bladder and ureters with a rapidly acting germicidal quality. The test organisms were *Staphylococcus aureus* and *B. coli* only.

Cook et al[2] in their study reported that a local anesthetic depressed respiration of yeast to a degree roughly proportional to their toxicity. The most toxic (Diothane® and Nupercaine®) were readily destroyed.

Hirsch and Werner[3] in their report in 1952 stated that procaine showed no bacteriostatic effect when used in broth cultures up to 4 per cent concentration.

Lambin and Bernard[4] made a study in France in 1953 of the bacteriostatic properties.

Hatnisch and Lammers[5] reported contrary results in the same journal a year later. They stated that procaine had antibacterial properties.

A Spanish patent was issued to Francisco G. Muller[6] for a method of preserving organic material such as human cadavers, skins, hides, etc. with a combination of antibiotics, procaine, and lactobiose.

Goldschmied et al[7] reported that the action of lethal doses of diphtheria toxin was definitely delayed by prior administration of intravenous injection of procaine.

Considering the previous studies reporting somewhat contradictory findings, a more detailed investigation of the bactericidal and fungicidal properties of procaine was launched with the use of the F.D.A. sterility testing procedure.

Twenty-two microörganisms were inoculated into 100 ml. of fluid medium. One loopful of an overnight culture was introduced into either 100 ml. of fluid thioglycollate or Sabouraud's medium (depending on the requirements of the organism used) containing 0.5, 1.5, 2, and 5 per cent procaine. Tubes were then placed under proper incubation temperature for at least one week. For control, an identical inoculum was added to the same medium without the addition of procaine.

The effectiveness of 5 per cent procaine against the 22 test organisms (including resistant *Staphylococcus aureus*, Proteus and Pseudomonas) as demonstrated in table 1 opens the door to many possibilities for its use in ophthalmic ointments and solutions, treatment of burns, and preservation of stock sterile solutions. Its relative innocuity when used in human tissue warrants a study of its use as a fungistatic agent. Various combinations for systemic fungus (such as inhalants for lung fungus infestation), enteric conditions, local abscesses, particularly those complicated by fungus, should be explored fur-

TABLE 1

Effectiveness of 5 per cent Procaine HCl in 50 ml. Nutrient Broth

Organism (ATCC) or PCI	Hours Incubation at 32 C*					Controls		
	24	48	72	96	1 wk.	24	48	1 wk.
1. *A. aerogenes* 129	−	−	−	−	−	+		
2. *K. pneumoniae* 10031	−	−	−	−	−	+		
3. *M. flavus* 10240	−	−	−	−	−	+		
4. *S. subflava* 7468	−	−	−	−	−	+		
5. *B. subtilis* 6633	−	−	−	†		+		
6. *B. cereus* 11778	−	−	−	−	−	+		
7. *A. aerogenes* 884	−	−	−	−	−	+		
8. *Staph. aureus* (B.B.)	−	−	−	−	−	+		
9. *Esch. freundii* (PCI) 8090	−	−	−	†		+		
10. *Proteus mirabilis* 767	−	−	−	−	−	+		
11. *E. coli* 10536	−	−	−	−	−	+		
12. *Pseudomonas sp.*	−	−	−	†		+		
13. *B. stearothermophilus* 7953	−	−	−	−	−	+		
14. *E. coli* 1618	−	−	−	−	−	+		
15. *Candida tropicalis* 13803	−	−	−	−	−	+		
16. *Staph. aureus* (ENCAP.) 13709	−	−	−	−	−	+		
17. *Mycobacterium sp.* 362	−	−	−	−	−			+
18. *Sarcina lutea* 9341	−	−	−	−	−	+		
19. *Pseudomonas sp.*	−	−	−	−	−	+		
20. *Pseudomonas sp.* (B476)	−	−	−	−	−	+		
21. *Saccharomyces cerevisae* 9763	−	−	−	−	−	+		
22. *Aspergillus niger* 10535	−	−	−	−	−	+		

− Negative

+ Growth

* Except *B. stearo.* no. 13 at 48° C, and no. 3, no. 4, and no. 18 at 25° C.

† No. 5 and no. 9, no. 10 and no. 16 viable when filtered; no. 12 and no. 7 nonviable when filtered.

ther, since the need for nontoxic fungistatic agents is very great.

Table 2 indicates that 2 per cent procaine is basteriostatic but not bactericidal. Solutions of 0.5 per cent, 1 per cent, and 1.5 per cent are not antagonistic to the growth of microörganisms.

TABLE 2

Effect of Four Concentrations of Procaine HCl on Microörganisms

ORGANISM (ATCC)	Nutrient Broth Containing Procaine HCl Incubated* for Ten Days				Controls
	0.5%	1.5%	2%	2.5%	
† *A. aerogenes* 129	+	+	−	−	+
K. pneumonie 10031	+	+	−	−	+
M. flavus 10240	+	+	−	−	+
S. subflava 7468	+	+	−	−	+
‡ *B. subtilis* 6633	+	+	−	−	+
B. cereus 11778	+	+	−	−	+
A. aerogenes 884	+	+	−	−	+
Staph. aureus	+	+	−	−	+
‡ *Esch. freundii* 8090	+	+	−	−	+
‡ *Proteus mirabilis*	+	+	−	−	+
Esch. coli 10536	++	+	−	−	+
† *Pseudomonas sp.*	+	+	−	−	+
B. stearothermophilus 7953	+	+	−	−	+
Candida tropicalis 13808	+	+	−	−	+
‡ *Staph. aureus* 13709	+	+	−	−	+
Mycobacterium sp. 362	+	+	−	−	+
Sarcina lutea 9341	+	+	−	−	+
Pseudomonas sp.	+	+	−	−	+
Saccharomyces cerevisae 9763	+	+	−	−	+
Aspergillus niger 10535	++	+	−	−	+

* Cultures incubated at 32° C, 25° C, and 48° C depending on growth requirements.

† Nonviable when broth was filtered through membrane filter.

‡ Viable when broth was filtered through membrane filter.

The results of this investigation show striking similarities to a previous study on survival of microörganisms in dihydrostreptomycin solution.

Procaine in 5 per cent solution is bacteriostatic to spores of sporing bacteria and is bactericidal as well as bacteriostatic to some of the vegetative cells of nonsporing bacteria, but in contrast to DHSM (5 Gm./ml.) procaine in 5 per cent solution is fungistatic and fungicidal.

Its effectiveness against a broad spectrum of bacteria including Pseudomonas as well as resistant *Staphylococcus aureus* and its fungistatic and fungicidal qualities open the field for further investigation in vivo in clinical applications to a great variety of conditions now considered not responsive to presently available therapeutic agents.

Its use, combined with an aerosol in pulmonary fungus infections, in the prevention of infection in burns so prone to develop infection despite oral administration of various bacteriostatic agents, in ophthalmic solutions and ophthalmic infection, in resistant abscesses, and in rectal and sigmoidal lesions, and the possibility of a long-acting solution to areas predisposed to infection as from trauma should be considered. The obtaining of a nontoxic fungistatic and fungicidal agent is of paramount importance.

It is hoped that opening the field will result in further exploration of this rather remarkable drug so commonly thought of as an injectable local anesthetic only. No adverse effects from application to skin, mucous membrane, or ophthalmic tissue have been noted.

SUMMARY

Procaine solution is found to have bactericidal, bacteriostatic, fungicidal and fungistatic qualities when used in proper strength solutions against the standard test organisms. It is believed that a new avenue for the control of fungus and bacterial infections has been opened.

REFERENCES

1. Macht, D. I., and Satani, Y.: Antiseptic action of local anaesthetics against *Staphylococcus aureus* and *B. coli.* J. Urol., 1920, **4**, 347.
2. Cook, E. S., and Sister Mary of Lourdes McDewitt: Depression of tissue and yeast respiration by local anesthetics. Studies Inst. Divi. Thomas, 1945, **4**, 107.
3. Hirsch, E., and Werner, H.: Local anesthetic action of several p-aminosalicylic acid esters. Arzneimittelforsch., 1952, **2**, 313.

(*Continued on page 435*)

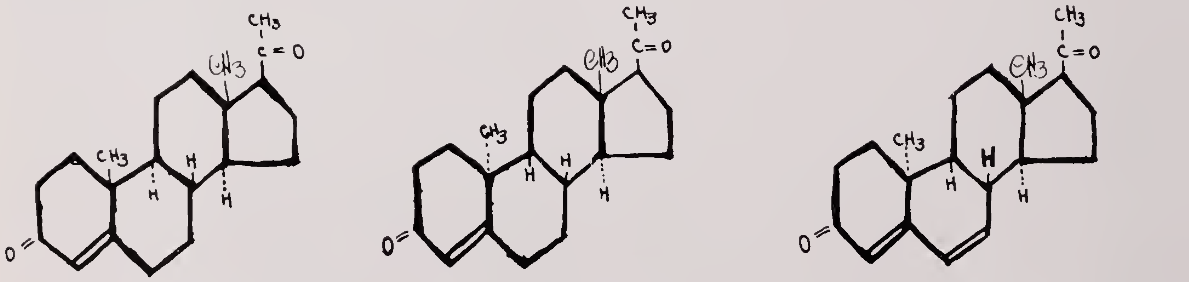
Clinical Trial of Isopregnenone, a New Progestational Agent

Preliminary Study

IN WHAN CHANG, M.D.
Senior Resident, Columbia Hospital for Women, Washington

SINCE KARL BUTENANDT made a hormone synthetically in 1934 by conversion from an inert steroid of known composition, various synthetic progestational agents have been produced. Isopregnenone* is a new, synthetic, orally effective progestational compound which is termed as 6-dehydro retroprogesterone and is identified chemically as 9 β 10 α pregna-4,6-diene,3,20-dione. This compound is the stereoisomeric analogue of progesterone, chemically derived from retroprogesterone by introducing a double bond between the 6 and 7 positions (figure 1).

The fact that alterations in the steric configuration of steroid hormones may lead to significant changes in their pharmacologic properties has been reported[1] and certain 9 beta 10 alpha-stereoisomeric analogues of progesterone[2] and their derivatives possess marked progestational activity when administered orally. The same compounds were also found to be capable of inducing a definite secretory transformation of the endometrium when given orally to estrogen-primed amenorrheic women.[2, 3, 4] Comparison of isopregnenone and progesterone by the Clauberg test[5] in immature rabbits showed that isopregnenone was 34 times more active than progesterone. Animal studies conducted in rats showed that isopregnenone maintained pregnancy after ovariectomy on the tenth day of gestation and that this compound was not estrogenic or antiestrogenic and was without corticoid activity. The effect of isopregnenone on humans have been reported,[2, 3, 6] which indicates that isopregnenone has no thermogenic activity and no androgenic activity. This compound did not interfere with the characteristic biphasic temperature pattern and did not delay ovulatory menses.



PROGESTERONE RETROPROGESTERONE 6-DEHYDRO RETROPROGESTERONE (ISOPREGNENONE)

FIG. 1. Chemical structures of isopregnenone with progesterone and retroprogesterone.

---

* Supplied as Duphaston by Philips Roxane, Inc., 2400 Frederick Avenue, St. Joseph, Missouri.

METHODS AND MATERIALS

A clinical trial of isopregnenone on 68 patients was made for various obstetric and gynecologic disorders for which parenteral progesterone is considered beneficial. The total amount of drug given to each patient ranged from 40 mg. to 6,500 mg. in single or divided daily doses of 5 to 40 mg., depending upon the disorder or for convenience.

The drug was given only after complete physical and pelvic examinations, and these were repeated as often as necessary in follow-up visits. All patients were seen at least once a month and were asked about and examined for any undesirable side-effects. For those women who did not report withdrawal bleeding, laboratory pregnancy tests were done in most in order to confirm and correlate the results.

Indications for which this compound was used are shown in table 1.

TABLE 1

Various Disorders in Which Isopregnenone Was Used

	No. of Patients
Obstetric Disorders	
Premature labor	12
Threatened abortion	7
Habitual abortion	1
Pregnancy test	9
TOTAL	29
Gynecologic Disorders	
Endometriosis	7
Primary dysmenorrhea	2
Dysfunctional uterine bleeding	12
Amenorrhea, oligomenorrhea, hypomenorrhea	16
Infertility	2
TOTAL	39

PREMATURE LABOR, THREATENED ABORTION, HABITUAL ABORTION GROUPS (Table 2)

In the premature labor group there were 12 patients, in the threatened abortion group seven, and in the habitual abortion group one treated with isopregnenone with an average dose of 30 to 40 mg. a day. Medication was continued as long as there were irregular cramps with or without vaginal spotting. Duration of medication varied from 2 days to 5½ months.

Premature labor group (over 20 weeks of gestation). One patient went into premature labor following appendectomy which subsided after three days of treatment. One patient delivered a macerated fetus two weeks after use of the medication; the fetus apparently had been dead for some time. One patient with hydramnios and one patient with premature separation of the placenta delivered viable infants prematurely. Seven patients delivered full-term infants, and two patients delivered near-term infants.

TABLE 2

Results from Premature Labor, Threatened Abortion, and Habitual Abortion Groups

Group	No. of Patients	Delivered at (Weeks)
Premature labor	12	Term—7, premature—4, stillbirth—1
Threatened abortion	7	Term—1 Premature—2 Aborted—2 Still pregnant—2
Habitual abortion	1	Still pregnant—1

Threatened abortion group (at or less than 20 weeks of gestation). One patient aborted on the day that medication was begun, and one aborted within 48 hours. Two patients are still pregnant, one delivered a viable infant at term, and two delivered nonviable fetuses prematurely.

Habitual abortion group (two or more successive miscarriages). One patient in this category was diagnosed as being pregnant at seven weeks by the isopregnenone pregnancy test, and for 5½ months she has been on isopregnenone treatment with the pregnancy progressing well up to date; her E.D.C. was March 17, 1962. The total amount received was 6,500 mg.

Eight male and six female infants were born among these groups, and there were no masculinizing effects or detectable abnormality in any of them.

PREGNANCY TEST GROUP (Table 3)

Drug pregnancy test was done on a total of nine patients who missed or had delayed menses not longer than two months. The average dose used for the test was 30 to 60 mg. in three to five successive days. All patients were asked to report withdrawal bleeding within ten days following cessation of medication. Two patients reported withdrawal bleeding and were found not to be pregnant. Seven reported no withdrawal bleeding and were all found to be pregnant. In five of seven the diagnosis was confirmed by positive laboratory pregnancy tests, and in the remaining two the diagnosis was confirmed by reëxaminations.

TABLE 3

Results Obtained in Various Gynecologic Disorders

Group	No. of Patients	No. of Cycles Treated	Results
Endometriosis	7	12	Complete relief—5 Relative relief—2
Dysmenorrhea	2	4	Complete relief—2
Dysfunctional uterine bleeding	12	15	Improved—6 Slightly improved—1 Not improved—5
Amenorrhea	3	5	Good withdrawal menses—3
Oligomenorrhea	11	13	Good withdrawal menses—9 Scanty withdrawal menstrual flow—1 No withdrawal menses—1
Hypomenorrhea	2	4	Improved—1 Not improved—1
Infertility	2	3	Pregnant—1

ENDOMETRIOSIS, DYSMENORRHEA GROUP

Nine patients were treated for dysmenorrhea. Two had primary dysmenorrhea with no detectable abnormal pelvic findings, and both reported complete relief from their symptoms while on isopregnenone therapy, with doses of 10 mg. daily from the fifth to twenty-fifth day of the cycle. One of these two patients reported a typical ovulatory temperature curve despite the medication. Seven were thought to have endometriosis, in two of whom the diagnosis was proved at surgery, and in the other five the diagnosis was made by history and pelvic findings. In the latter group two were improved after receiving antibiotic therapy for pelvic inflammatory disease along with isopregnenone, and evaluation was difficult. The dosage for the endometriosis group was from 30 to 40 mg. daily continuously.

Patients who received isopregnenone more than two months continuously in dosages up to 30 to 40 mg. daily reported regular patterns of break-through menses with no irregular bleeding between menses.

DYSFUNCTIONAL UTERINE BLEEDING GROUP

Twelve patients who had no detectable ab- abnormal pelvic findings and had irregular vaginal spotting between their regular menses of various durations were treated with the drug in dosage of 5 to 30 mg. daily for from 3 to 20 days. In five the results were not satisfactory. Two of these were later found to have incomplete abortions. Six patients reported improvement of their symptoms; these received isopregnenone in dosages of 10 or more mg. daily. One patient reported only slight improvement.

AMENORRHEA, OLIGOMENORRHEA, HYPOMENORRHEA GROUP

Among this group, three patients had secondary amenorrhea of more than six months' duration, 11 had oligomenorrhea and two had hypomenorrhea.

Amenorrhea group. Three patients in this group were initially given the same dosage of isopregnenone as in the pregnancy test in order to determine response of the endometrium to this compound. Two reported no withdrawal bleeding, and they were treated cyclically with the estrogenic agent and this compound. Both reported good withdrawal menses after each cycle. One reported good withdrawal bleeding with the initial dose, and this patient was given only isopregnenone cyclically with good response. The dosage used for this group was 5 to 10 mg. daily for 2 weeks from the calculated menstrual date.

Oligomenorrhea group. Eleven patients in this group were menstruating two to three times a year for various durations. They were also given an initial dose to determine withdrawal bleeding except in two patients who were thought to be pregnant on initial examination; these were given the drug continuously for 4 weeks with good withdrawal bleeding after cessation of treatment. In the other nine patients, all but one reported good withdrawal bleeding. One who did not have withdrawal bleeding was later found to be menopausal. Eight out of nine patients were given isopregnenone in dosage of 5 to 20 mg. daily for 5 to 10 days from the calculated date of menstruation, and seven patients reported good withdrawal bleeding and one a scanty amount of withdrawal menses.

One patient of this group reported a monophasic temperature curve despite the medication.

Hypomenorrhea group. Two patients in this group were menstruating regularly each month with only a staining amount of flow, and they were given isopregnenone in dosage of 5 to 10 mg. daily 5 to 10 days from their calculated date of menses for four cycles. Three cycles of hypomenorrhea persisted, and one cycle was reported of good withdrawal bleeding.

INFERTILITY GROUP

Two patients in this group, one with three years of infertility and one with seven years of infertility, who had no detectable pelvic abnormality and had typical ovulatory temperatures, with regular menstrual patterns, were treated with isopregnenone in dosage of 10 mg. daily from the fourteenth to the twenty-eighth day of the cycle. One patient conceived during the first month of therapy, and one continued to report a biphasic temperature curve while on the medication.

SUMMARY

In a clinical trial of the use of isopregnenone in 68 women no undesirable side-effect was noted. Two among the threatened abortion group complained of nausea and vomiting, but this was obviously difficult to evaluate since these symptoms often occur in early pregnancy. Withdrawal bleeding did not occur in those who had estrogen deficiency without estrogen therapy to prime the endometrium. Patients among those who received isopregnenone from the fifth to the twenty-fifth day of the cycle reported an ovulatory temperature curve, and patients who received isopregnenone during the second part of their calculated cycle reported a monophasic temperature curve. Patients who received isopregnenone continuously more than one month reported regular patterns of break-through menses. Isopregnenone pregnancy tests were very satisfactory. In those who received isopregnenone because of premature labor the results were gratifying. In the dysfunctional uterine bleeding group those who received 10 or more mg. a day had good results. In the threatened abortion group, and the premature labor group 14 infants were born, and none showed any genital abnormality or masculinization effect, including six female infants.

CONCLUSION

The clinical trial of the use of isopregnenone in 68 patients indicates that this compound is a nontoxic, nonestrogenic, nonthermogenic, nonandrogenic, and orally effective progestational agent for the treatment of various obstetric and gynecologic disorders when such an agent might be considered to be beneficial. This compound is preferable to other progestational agents in the treatment of endometriosis for the patient who wishes to become pregnant, since this compound does not inhibit ovulation in a normal ovulatory woman.

REFERENCES

1. SCHOLER, H. F., KASSENAAR, A., AND QUERIDO, A.: Pharmacological properties of retroprogesterone derivatives, 9β 10α steroid, presented before the First International Congress of Endocrinology in Copenhagen, July 18 23, 1960, Session 8-g, No. 431.

(*Continued on page 435*)

Regression of Carcinoma of the Lung after Chemotherapy and Immune Globulin

WILLIAM L. JAMISON, M.D.
Chief, Division of Cardiovascular Surgery, Doctors Hospital, Washington

E. RAYMOND FENTON, M.D.
Chief, Division of Pulmonary Diseases, Doctors Hospital

I. L. MARKS, M.D.
Chevy Chase, Maryland

THE FOLLOWING CASE is reported to encourage physicians to take a more optimistic attitude toward cancer and to push forward with a vigorous attack with all therapeutic weapons at hand.

Although it is possible that this case could be a spontaneous regression, as reported by Blades and McCorkle,[1] the incidence of such a phenomenon variously given as between one in 100,000 and one in 80,000 makes it unlikely.[2] In the most recent publication available Dr. David A. Karnofsky[3] has summarized briefly the treatment of inoperable cancer of the lung, stating, "In nonresectable lung cancer the results obtained by any form of treatment are poor. The only useful drugs—although feeble therapeutically—are the polyfunctional alkylating agents. A favorable response, if it occurs, is prompt but transitory. About 30 to 40 per cent of the patients may obtain some degree of improvement, and the superior vena cava compression syndrome is relieved in 80 to 90 per cent of the cases. Radiation therapy is the most important method of treatment. Tissue doses in the range of 3,000 to 4,000 r, delivered to the primary lesions in the lung and mediastinum, may effectively control the local disease. Neurologic findings due to cerebral metastases or pain due to bone involvement may be relieved by irradiation. Nitrogen mustard is sometimes used prior to X-ray therapy because it seems to diminish the possibility of edema, which is sometimes associated with the onset of radiotherapy."

REPORT OF CASES

B. K., a 50-year-old white man, a Government executive, was admitted to Doctors Hospital for surgery on March 13, 1961. The patient's presenting symptom was a cough of five months' duration following an episode of upper respiratory infection. An X-ray film made four months before admission was thought to show virus pneumonia. The patient had been a heavy smoker (one to two packages per day) for his entire adult life. One month after this X-ray film and three months before admission to the hospital the patient developed a blood-streaked sputum. An X-ray film made on admission to the hospital is shown in figure 1.

Exploratory thoracotomy was performed on March 17, 1961 by one of the authors (W. L. J.). A mass, 5 cm. in diameter, was found in the right lower lobe. A biopsy was reported as malignant. The carinal lymph nodes lying in the fork between the right and left main-stem bronchi were then resected as a block and given to the pathologist. A frozen section was performed and reported positive for metastatic carcinoma. Because of the central spread to the carinal lymph nodes a pneumonectomy was not thought to be advisable.

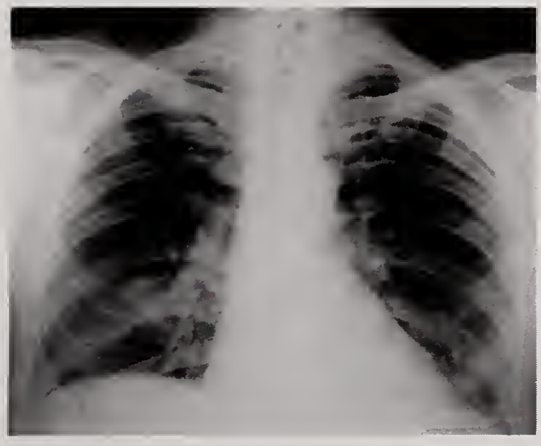


FIG. 1. Three days before surgery.

Triethylenethiophosphoramide,* 100 mg. in 50 c.c. of distilled water, was then injected into the mass in the right lower lobe and also into the superior mediastinum. The pleural space was washed with monoxychlorosene.† In order to diminish future pain from the tumor a sympathectomy, T-1 through T-6, was performed as advocated by one of the operating surgeon's teachers, Dr. Richard Overholt, of Boston.

The postoperative course was uneventful.

Because of the poor prognosis it was decided to institute additional chemotherapy. Dualar (Armour AB-103‡) was given on two successive days six weeks postoperatively. No reaction was observed.

We agree with the theory of many observers of the virus etiology of cancer. The clinical picture of virus infection in many of these cases adds strength to this theory, and because it has often been observed clinically that the patient's immune mechanism is reduced by a malignant state, it was decided that immune globulin might be of value. Also, since Velban§ (vinblastine sulfate) had appeared to be of low toxicity, it was decided to give this drug at weekly intervals.

Accordingly, the following monthly regimen was carried out:

1. Dualar (AB-103®) 100 mg. at weekly intervals for 2 weeks, followed by
2. Velban®, 8 to 10 mg. at weekly intervals for 2 weeks.
3. Immune globulin,* 4 to 5 c.c. once a week.

To date, ten months following surgery, the patient has received the total following dosages: AB-103®, 1,195 mg.; Velban®, 134 mg.; immune globulin, 190 c.c.; Thiotepa®, 100 mg. (at surgery).

The patient has been asymptomatic except for occasional nosebleeds.

Serial roentgenograms are shown in figures 1 through 5. Regression and almost complete disappearance of the original tumor has been observed over these ten months. The size and density of the tumor showed no regression in figure 2 and, in fact, it appeared larger three weeks postoperatively and after the injection of Thiotepa®. The film made six weeks postoperatively (figure 3) also shows no change. Therapy with AB-103® and Velban®

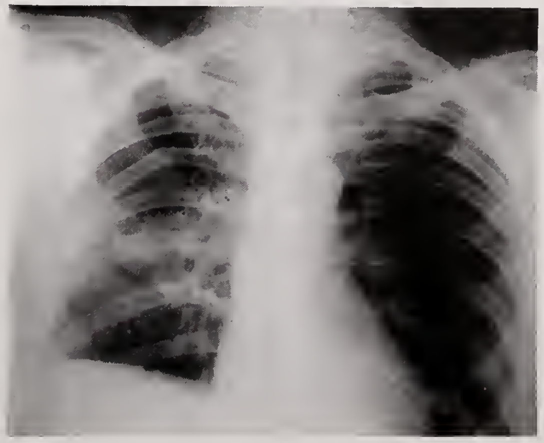


FIG. 2. Three weeks after injection of Thiotepa at time of surgery.

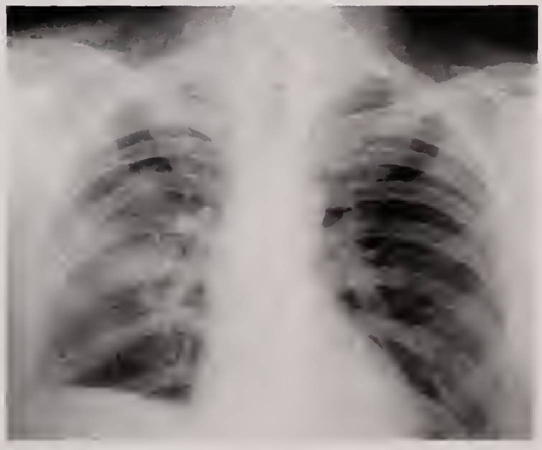


FIG. 3. Six weeks after surgery, before treatment with Velban and AB-103.

---

* Produced as Thiotepa by Lederle Laboratories Division, Pearl River, New York.

† Chloropactin XCB, a product of Guardian Chemical Corporation, Long Island, New York.

‡ Supplied by Armour Laboratories, Kankakee, Illinois.

§ Produced by Eli Lilly and Company, Indianapolis 6, Indiana.

* Produced by Lederle Laboratories Division, Pearl River, New York.

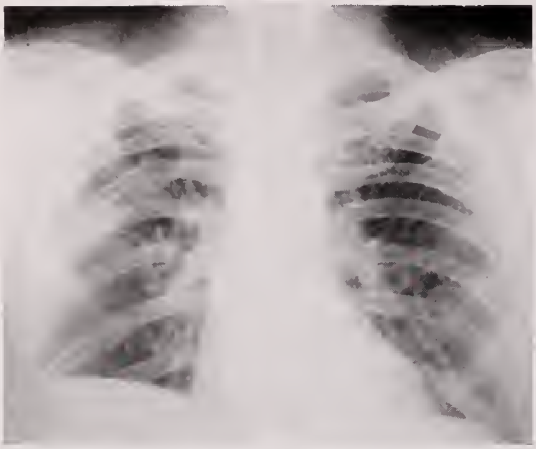


FIG. 4. Seventeen weeks after chemotherapy with Velban and AB-103.

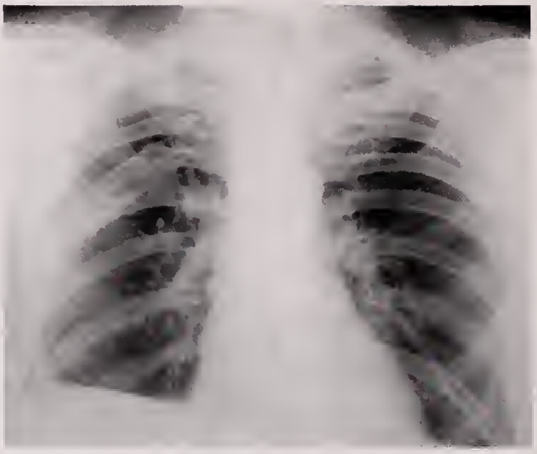


FIG. 5. Seven and one-half months after chemotherapy with Velban and AB-103.

was begun at this time. The film made 23 weeks postoperatively (figure 4) gives the impression of cavitation in the hitherto solid lesion. The film made nine months postoperatively (figure 5) shows almost complete regression.

It is our belief that the last roentgenogram would be called clear of localized signs of malignancy by most radiologists who did not know the patient's case history. Dr. Fred O. Coe* corroborated this after reviewing the films.

SUMMARY

An inoperable case of bronchogenic carcinoma of the right lung with metastasis to the carinal lymph nodes was treated by chemotherapy and the use of immune globulin. Serial X-ray films of the chest showed complete regression of the tumor, and the patient has remained asymptomatic for ten months.

REFERENCES

1. BLADES, B., AND MCCORKLE, R. G., JR.: Case of spontaneous regression of untreated bronchiogenic carcinoma. J. Thor. Surg., 1954, **27**, 415.
2. EVERSON, T. C., AND COLE, W. H.: Spontaneous regression of cancer: preliminary report. Ann. Surg., 1956, **144**, 366.
3. KARNOFSKY, D. A.: In Consultation. Medical Tribune, March 5, 1962.

---

* Chief, Division of Radiology, Doctors Hospital, Washington, D. C.

Skull Surgery by Prehistoric Man*

Part II

STEPHEN PODOLSKY, M.D.†
Rotating Intern, Henry Ford Hospital, Detroit

THE FACT THAT TREPANATION was carried out on dead as well as on living individuals has led many to believe that it was done simply to obtain the pieces of bone ("rondelles") for magic or religious purposes. Many such excised bits of skull have been found, carefully preserved, and frequently perforated, indicating that they were worn as necklaces.[3] Sigerist states further that when an individual who had been successfully trephined died, rondelles or other fragments were cut out of his skull in such a way that they would include part of the edge of the original perforation. Most authorities agree that these rondelles were used as amulets, but there is disagreement as to how widespread that practice was.

At the beginning of his studies Broca[11] strongly denied the possibility of any surgical purpose for trephination and considered it an initiation rite comparable to the tonsure of the priest. When trephined skulls were excavated in increasing numbers he changed his views and assumed that the purpose of the operation was to liberate epileptics, the insane, people afflicted with any forms of convulsion, persistent headache, etc. from evil spirits.[30] He thought that individuals who survived the operation became the object of veneration, and rondelles were taken from their skulls after they died to be used as amulets protecting against convulsive diseases.

With Muñiz as co-author, McGee wrote a famous article[14] in 1897 in which he concluded that the prehistoric trephining was wholly magical:

> "... There is an important stage in the development of medical and surgical practice in which the motive is wholly thaumaturgic, yet in which the incantation is accompanied by medication or manipulation; ... sometimes the manipulation is beneficial, when the prestige of the shaman grows, and the aimless operation is thereby encouraged until, if frequently successful, it grows into empiricism, the forerunner of scientific medicine. There is thus a gradual transition from purely thaumaturgic manipulation into empiric surgery. Now, it would appear that the Peruvian trephining represents some stage in this transition; and nothing more than inspection of the ill-planned, clumsy, and extravagant cutting is required to show that the stage was early, and that the empiricism in which the pupil imitates the teacher and the son the sire could hardly have been reached."

A diametrically opposed view, that all cases of trephining can be accounted for on therapeutic grounds, is held forth by a Peruvian physician and anthropologist, Julio Tello. His study of his personal collection has led him to answer the above argument:

> "In Dr. McGee's work on the Muñiz collection the question of the motives which led the ancient Peruvians to practice trephining was left, in my opinion, quite undecided on the point whether it was due to religious or thaumaturgic reasons as Dr. McGee thought, or whether it was essentially therapeutic.
>
> Examination of the majority of the trephined skulls in our collection shows that four fundamental motives led the operator to adopt therapeutic measures:
>
> 1. An antecedent fracture.
> 2. A simple traumatism of the cranium which denuded the periosteum and was followed, or not, by an inflammatory process.

---

* This article is being published in two parts, of which this is Part II. Part I appeared in the May issue of the MEDICAL ANNALS.

† Present address: New England Deaconess Hospital, Boston 15, Massachusetts.

3. A circumscribed periostitis or osteoperiostitis, perhaps also of traumatic origin.
4. Lesions, probably of a syphilitic nature."[19]

Occasionally in the later neolithic trephined skulls changes such as hydrocephalus, necrosis of bone, and traumatic lesions have been observed. Except in the earliest cases there are many examples of fractures, old or recent, associated with trephined skulls. It has been suggested that skull fractures present in the earliest trepanations may have occurred as complications of the procedure, the result of the patient not "understanding" the necessity of the operation.[29] Stewart[27] has emphasized that the frequency of the procedures on the left side of the skull, which was most vulnerable to head injuries during warfare with right-handed adversaries, is strong evidence for a medical motivation. He states that "the alleviation of pressure on the brain caused by skull fracture was the most frequent reason for the operation in Peru and Melanesia; it may have been the reason less frequently in Europe."

The size of the holes vary considerably, but the older skulls definitely have larger pieces removed. Perhaps prehistoric surgeons performed multiple trepanations to permit the escape of the demon in recurring convulsive states. It may be inaccurate to call these primitive men "surgeons" if they were opening skulls merely to allow imaginary supernatural beings to escape. However, these demons or spirits were objective to his mind and he was sincere in his motives.

P. R. Giot,[31] Curator of the Prehistoric Museum of Rennes, has recently stated that prehistoric and ethnographic anthropologists have shown a wiser reaction in accepting the fact of surgical trephining by neolithic men than the larger body of physicians who show an exaggerated nonacceptance. He says that the evidence from recent primitive people in Oceania (Tahiti, New Caledonia, New Britain, Loyalty), in the Kabyles of Northern Africa, in the area of Albania, etc. clinches the argument. Giot[31] states that other conditions may have been present in the neolithic skulls, giving the impression of trepanation, but these could only have accounted for a small percentage. Thus, the gaps in the skulls could have had:

1. Congenital origin—periosteal dysplasia, etc.
2. Infectious or neoplastic origin—tuberculosis, lues, localized osteomyelitis, mycoses, dermoid or epidermoid cyst boring through the bone, sarcomas, metastases, multiple myeloma, Schüller-Christian disease, etc.
3. Parasitic origin—onchocercosis.
4. Traumatic origin, even as far back as birth.

In view of the fact that mutilating cranial operations have been done by primitive people in recent historic times [32] as a means of treating epilepsy, idiocy, and similar afflictions, the idea has been popular that the ancient trepanations were done for identical reasons. This would certainly not be the first time that a parallel and similarity between the most ancient epoch of medical history and the actual medicine of primitive peoples were noted. Trephining to remove splinters and fragments of a fractured skull is also done by modern-day primitive people as well as by prehistoric man.

Ford[33] reviewed trephination in Melanesia and states that of the holes cut with primitive instruments "many circular ones might well be mistaken for the work of a European metal trephine." The operation among these natives appears to be attempted chiefly for definite therapeutic purposes. However, the operation in Melanesia is also done in children as a prophylaxis against headaches, vertigo, epilepsy, and other such ailments in later life.[33] Extremely striking about all the eye-witness accounts of trephining by primitive people is the fairly high degree of surgical judgment shown in the selection of cases for operative intervention and the fact that the steps of the operation are carried out in an orderly manner. The instruments are selected judiciously from the simplest materials, and there appears to be rational nursing.

The results are almost unbelievable. Bishop[34] declares that a series of 32 trephinations carried out at St. George's and Guy's Hospitals in England during the period 1870–77 had a mortality of 75 per cent, while the primitive Melanesian surgeons had over 70 per cent survivals.

In 1959 Lastres and Cabieses[35] presented an exhaustive study of prehistoric and primitive trephining, listing over 600 references in Lima's *Anales de la Facultad de Medicina.* The articles are profusely illustrated with dozens of good photographs from many collections. All types of trepanations, stages of healing, fractures, neoplasms, deformed skulls, etc. are present. Unfortunately, Dr. Lastres' recent death has caused temporary postponement of the last part of the article.

An earlier thorough review in the same journal was written ten years before by Fernández-Enríquez.[36] MacCurdy's paper[37] a number of years ago has an extensive atlas of mummies, skulls, bones, and excavation sites.

The extensive nature of some of these operations could not have been attained without the use of hypnotics to avoid fatal shock. Many authors believe that the pre-Incan Peruvians achieved some degree of anesthesia by chewing the leaves of *Erythroxylon coca* before using the sharp obsidian tools.[10, 38, 39, 40] Walker[15] states that many pre-Columbian historians refer to the coca bean as the "divine plant of the Incas" and that it was used for analgesia. Quevedo[41] has listed a number of plants as being used in the form of infusions for washing wounds and others as being used in the form of pulverized leaves or poultices to be applied to contusions. The ancient Peruvians probably induced general anesthesia by alcoholic drink or narcotic drug as well. Perhaps the surgeon gave a magical incantation which had a hypnotic effect on the patient.

Since infection was unusual, it is generally believed that antiseptic agents were used on the wounds. Indeed, MacCurdy[37] believes there is strong evidence that the antiseptic properties of *acid cinnamique* were used in Peruvian trephining operations.

Close to one-third of a collection of 75 trephined skulls show geometrically regular patterns of osteitis or of scarring around the surgical openings.[2] In one case with an unhealed and a healed opening a geometrical pattern of osteitis was noted around the former, and a similar pattern of scarring was seen about the latter, which was then thought to be healed osteitis. Only two cases were seen in which there was evidence of spread of infection beyond the limits of the operative field, so that this reaction appears to be a chemical osteitis due to irritants in the surgical dressings, which, ironically, had probably prevented a bacterial infection. More recently Stewart[27] has altered his view of these findings and favors a septic osteitis rather than a chemical one.

Many examples of dressings have been found. Usually the wound was dressed with moss or fresh leaves and then covered with rolls of cotton. The San Diego Museum bears an excellent freshly trephined skull with a dressing in situ, found by Hrdlička[10] in Southern Peru.

Bleeding was controlled by digital pressure or even by a shrub such as pumacucie, which has tannic acid as an active astringent agent.[15] This plant is plentiful in the Peruvian Andes.

As versed as the ancient Peruvians were in the art of trephining, very few of their skulls have evidence of attempts to place some firm cover over the operative opening. However, Courville[6] believes that metal or gourd plates were sometimes used, and other authors[5, 10, 15] also refer to this occasional practice. The only case in which a gold covering was used is in the cranium of an elderly male at Paracas with a scraped out trephine opening.[28] One of the 19 Muñiz specimens "... is of interest also in that it was the only one in which a plate is known to have been used, a silver plate having been found in place over the aperture in the mummy case. The presence of the plate, its seat in the skull showing long wear, and the absorption and reparative growth all indicate that the operation was survived."[24] This skull is pictured in figure 4.

Needles made of bone splints have been found in the Paracan excavations as well as at least one skull in which sutures were used to sew the overlying scalp together.[15] Presumably cotton was the suture material, although in one patient, who died soon after the procedure, the scalp margins were approximated by tying together groups of hairs from both sides of the wound.

Courville and Abbott[42] have classified the traumatic lesions found in a general population of early Peruvian skulls into seven different types. The chief weapons used were the sling, the war club, and several varieties of maces and battle axes, as well as spears and lances. Few such skulls were trephined.

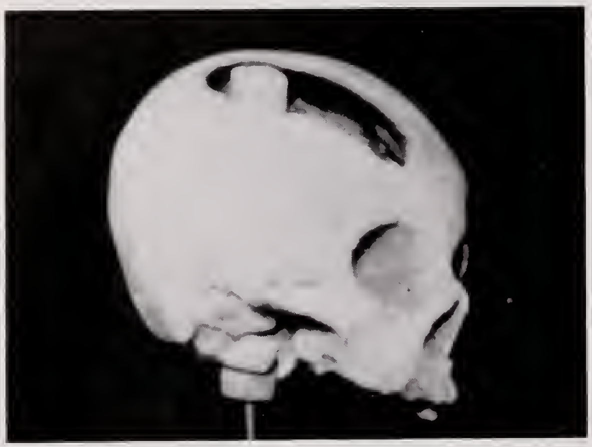


FIG. 4. Enormous trepanation (four inches by one inch) in a skull aged 25 to 30 years. This is the only Muñiz specimen which was found with a silver plate in place over the defect. Mutter Museum No. 1143.06.

Another operation has been noted in prehistoric crania. Although the skull was not opened, crosswise incisions were made along the coronal and sagittal sutures. Manouvrier[43] in 1895 noted this in neolithic female skulls from Seine-et-Oise and called it the "sincipital T." Mutilating marks and cicatrizations indicate that the dedeformity may have been produced by cauterization as well as by scraping. This curious operation was noted earlier in the 19th century by an English missionary as being in practice as a ritual among the contemporary inhabitants of the Loyalty Islands.[32] This identical practice again points out the similarity between the behavior of prehistoric man and modern primitive man.

Gordon[5] brings up the interesting thought that the sincipital T might have been a sign of disgrace similar to the sign put on Cain after he killed Abel (Genesis 4:15). The operation certainly appears not to have any surgical rationale, as some of the actual trephinings do. Recently, Pedro Weiss[44] described skulls, mostly of females and children, which he thinks bear the same type of cauterized scars as the sincipital T cases from neolithic France. The scars lack the characteristic "T" shape, and their description actually is quite similar to the postsurgical osteitis described by Stewart. Also, there is no other record of the Peruvians using cautery in their trephinations.

SUMMARY

Two of the earliest testimonies to the awakening of prehistoric man's mind and creative abilities are the drawings he painted in his caves (figure 5) and his first medical practice—cranial trephining during life. These practices originated in the Old World during the paleolithic and neolithic periods, respectively. Trephining was widely carried out throughout the ancient world, probably spreading from its original sites along the Mediterranean. It is generally believed that the operation was brought to America by way of Asia and then Alaska. It reached its highest development in Peru.

Skulls were sawed, scraped, and sometimes drilled. The majority of those discovered show clear evidence of bone healing around the wound edges. In all probability the cases of survival made up at least two-thirds of all operations. Most skulls are from males, although both sexes and all age groups are represented. Multiple openings are frequently seen, especially in the Peruvian specimens. Often there was a therapeutic rationale behind them.

A few extant skulls show trephining in areas of recent fractures. Many other crania are of unusual shapes and are deformed. Binding of infants' heads was a common practice in Paracas, Peru, where 90 per cent of skulls were trephined.

It has been postulated that the cranial deformities produced by such binding resulted in convulsive attacks later in life and that the cutting was done in an attempt to relieve these seizures. Contemporary primitive people have been observed to trephine living tribe members for just such a reason or for intractable headache or syncope.

FIG. 5. "What'd I tell you about drawing on the walls?"

Several years ago South American neurosurgeons removed a traumatic subdural hematoma from a man using only a stone "knife." There was no anesthesia except band constriction across the forehead and occiput, and the patient survived and did well. The procedure can no longer be considered an unfounded anthropological claim.

ACKNOWLEDGMENT: The author is indebted to Mrs. Ella N. Wade, Curator, Mütter Museum, College of Physicians of Philadelphia, and to Dr. T. D. Stewart, Curator, United States National Museum, for invaluable help in this study. Drs. R. S. Knighton, J. L. Ponka, R. J. Priest, and V. K. Vaikevicius were kind enough to read the manuscript.

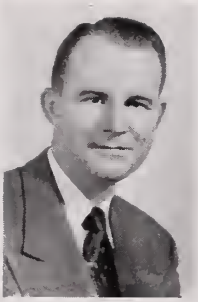
REFERENCES

1. OSLER, W.: The evolution of modern medicine, from a series of lectures sponsored by the Silliman Foundation at Yale University in April, 1913. New Haven: Yale Univ. Press, 1922.
2. STEWART, T. D.: Bull. Hist. Med., 1956, **30**, 293.
3. SIGERIST, H. E.: A History of Medicine, Volume I: Primitive and Archaic Medicine. New York: Oxford, 1951.
4. PRUNIÈRES, P. B.: Compt. rend. franc. pour l'Avancement des Sci., 1874, **3**, 597.
5. GORDON, B. L.: Medicine Throughout Antiquity. Philadelphia: Davis, 1949.
6. COURVILLE, C. B.: Bull. Los Angeles Neurol. Soc., 1959, **24**, 1.
7. GUIARD, E.: La Trépanation Cranienne chez les Néolithiques et chez Primitifs Modernes. Paris, 1930.
8. METTLER, C.: History of Medicine. Philadelphia: Blakiston, 1947.
9. LUCAS-CHAMPIONNIÈRE, J.: Les Origines de la Trépanation Décompressive: Trépanation Néolithique, Trépanation Précolombienne, Trépanation des Kabyles, Trépanation Traditionelle. Paris: Steinheil, 1912.
10. HRDLIČKA, A.: Ciba Sym., 1939, **1**, 170.
11. BROCA, P.: Bull. soc. d'anthrop. de Par., 2 ième sér., 1867, **2**, 403; trans. and reprinted with notes by Nott, J. C., Draper, J. W., and Squire, E. G.: J. Anthrop. Inst. New York, 1871–72, **1**, 71.
12. HOLMES, W. H., cited by Garrison, F. H.: An Introduction to the History of Medicine, 4th ed. Philadelphia: Saunders, 1929.
13. BINGHAM, H.: Nat. Geog. Mag., 1917, **29**, 431.
14. MUÑIZ, M. A., AND MCGEE, W. J.: Primitive trephining in Peru, from the 16th Ann. Rep. of the Bureau of American Ethnology for 1894–95. Washington, 1897, pp. 3–72.
15. WALKER, A. E.: Trans. Coll. Physicians Phila., 1958, **26**, 99.
16. CASTIGLIONI, A.: A History of Medicine, 2nd ed. New York: Knopf, 1947.
17. SELWYN-BROWN, A.: The Physician Throughout the Ages. New York: Capehart-Brown, 1938.
18. ROGERS, S. L.: Amer. J. Phys. Anthrop., 1938, **23**, 321.
19. TELLO, J. C.: Prehistoric trephining among the Jauyos of Peru. Proc. 18th International Congress of the Americas (1912). London: Harrison & Sons, 1913.
20. WEISS, P.: La Cirugía de Cráneo Entre los Antiguos Peruanos. Lima, 1949.
21. SCHRÖDER, G.: Fortsch. Röntgenstrahl, 1957, **87**, 538.
22. WADE, E. N.: Phila. Med., 1951, **47**, 333.
23. WADE, E. N., Curator, Mütter Museum, College of Physicians of Philadelphia: Personal communication.
24. MCGEE, W. J.: Bull. Johns Hopkins Hosp., 1894, **5**, 1.
25. RYTEL, M. M.: Quart. Bull. Northw. Univ. Med. Sch., 1956, **30**, 365.
26. GRAÑA, F., ROCCA, E. D., AND GRAÑA, L. R.: Las Trepanaciones Craneana en el Perú en la Epoca Pre-Hispanica. Lima: Imprenta Santa Maria, 1954.
27. STEWART, T. D.: Smithsonian Rep. for 1957, No. 4333, 1958, pp. 469–91.
28. TELLO, J. C.: Antiguo Peru: Prímera Epoca. Lima, 1929.
29. WAKEFIELD, E. G., AND DELLINGER, S. C.: Ciba Sym., 1939, **1**, 166.
30. BROCA, P.: Proc. Congrès Internat. Anthrop. et Arch. Préhist., Budapest, VIII^{e} session, 1876, pp. 101 96.

(*Continued on page 436*)

PRESIDENT'S PAGE

LIBERTY OR SECURITY—WHICH WILL IT BE?



There are those who would have us believe that we can have both. This is true only if our personal security is derived from our individual efforts and not from reliance upon others, particularly the state.

Security consists primarily of four basic elements—food, clothing, shelter and medical care. It is man's natural instinct to equip himself early in life to achieve these fundamental goals and in most cases to exceed them to the extent that he may enjoy some of the finer things of life. It is safe to say that the first one-third of the average lifetime is spent in preparation for this.

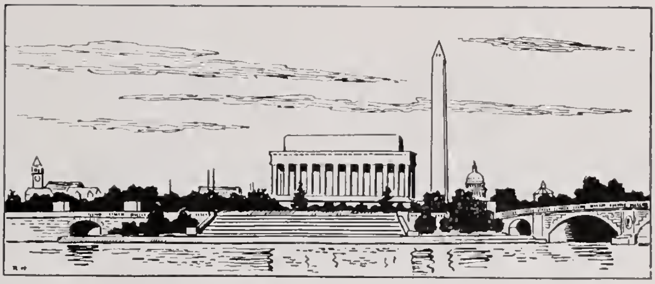
In our society there is no limit to the heights of one's achievement, but three factors usually govern this—ability, personality, and initiative. Our Creator did not endow everyone with the same amount of ability so one can only do his best with what he has. With personality and initiative, it's quite different; there seems to be no limit, depending entirely on the amount of effort spent in cultivating them. Herein lies one's greatest opportunity.

It is said that man spends his entire life seeking happiness, yet there can be no happiness without self-discipline, self-denial, self-respect, and, most of all, self-reliance. It is an inescapable fact that self-reliance, even in America, is not an automatic trait. In fact, for most individuals self-reliance can be developed only when they have no one else to rely upon. History is pregnant with examples of whole civilizations disintegrating because its people were lulled into reliance upon the state for their personal security, Ancient Rome being the most striking illustration.

It is amazing what man can do for himself when he knows there is no one else to rely upon. In the early seventeenth century courageous men, in their effort to escape the stifling atmosphere of Europe, landed on these shores and were faced with a wilderness filled with hostile Indians—not a land of non-earned personal security. By diligent exercise of their God-given traits of initiative and self-reliance, they laid the foundation for America, the greatest Bastion of Freedom ever known in the history of mankind and the remaining hope of the free world today.

Carved on the inner masonry walls of the Statue of Liberty in New York City is a quotation from Benjamin Franklin, which reads: "They that can give up essential liberty to obtain a litte safety deserve neither liberty nor safety." With bursting pride we sing "America—the land of the free and the home of the brave," but let us not forget that only the brave remain free.

J Spencer Dryden



EDITORIALS

George Cooley Takes Over

The Society is fortunate to have obtained the services of Mr. George W. Cooley as its Executive Director and Secretary. He succeeded Mr. Theodore Wiprud in this capacity on July 1, 1962. Thus Mr. Cooley becomes the second full-time executive secretary employed by the Medical Society of the District of Columbia.

Mr. Cooley is unusually well qualified for his new assignment, not only because of his training but experience. Since 1945 he has been, successively, Assistant and Associate Secretary and then Secretary of the AMA Council on Medical Service and Director of the Department of Medical Service. Because of his extensive travels in these positions and his study of medical socioeconomic problems in various parts of the country, he is one of the best informed investigators in this field. His understanding of the controversial issues of the day will therefore prove of greatest value to the Society.

GEORGE W. COOLEY
New Secretary of the Medical Society

During the past month Mr. Cooley has had time to look into the operation of the Society and therefore will be in an excellent position to deal with the problems before him. It will, of course, take several months for him to become thoroughly acquainted with the membership. It is hoped that members of the Society recognizing this will go out of their way to make his acquaintance. This will prove most helpful to him and beneficial to the Society.

Mr. Cooley was born in Mitchell, South Dakota, on April 11, 1911. His early education was obtained at his birthplace. Subsequently, he attended the University of Cincinnati, where he obtained his A.B. degree. He also obtained a degree from the same institution in Public Administration. Later he did graduate work in public health at the University of Michigan and in hospital administration at Northwestern University.

Prior to his association with the AMA, he was Secretary of the Cincinnati Regional Crime

Commission, Field Consultant for the National Municipal League, and Executive Secretary of the Academy of Medicine of Toledo and Lucas County. The latter experience will prove invaluable to him in his present position.

Among the organizations of which he is or has been a member are the American Society of Public Administration, Kiwanis Club, American Public Health Association, Illinois Public Health Association, Medical Society Executives Association, and National Medical Veterans Society. He is an honorary member of the Academy of Medicine of Toledo and Lucas County.

Mr. Cooley was married to Miss Mary Jane Metcalfe of Greenville, South Carolina, in 1935. They have one daughter, Marcia, 20, a senior at Beloit College, Wisconsin.

Again, it should be stressed that the speed with which Mr. Cooley becomes fully effective will depend upon his acquaintance with the membership. Drop in to see him; he will appreciate it.

T. W.

Narcotic Addiction in the United States

The American Medical Association and the National Research Council for many years have been concerned about and have studied the narcotic drug addiction problem. To assist in carrying out its studies, the AMA collaborated with the American Bar Association in establishing a Joint Committee which made an Interim Report to the two organizations in 1958 and a Final Report in 1959.

It is concluded that there is widespread public and professional misunderstanding about this subject, specifically (1) that the Federal Bureau of Narcotics believes drug addiction to be a crime—a belief that is contrary to the Federal law and its application by the Bureau, and (2) that the American Medical Association proposes the establishment of community ambulatory clinics for the withdrawal of narcotics from addicts or for the continuing maintenance of addicts on narcotics—a belief that is contrary to the official position of the AMA.

Historically, society has found it necessary to employ legal controls to prevent the spread of certain types of illness that constitute a hazard to the public health. Drug addiction is such a hazard.

The successful and humane withdrawal of individuals addicted to narcotics in the United States necessitates constant control, under conditions affording a drug-free environment, and always requires close medical supervision.

The successful treatment of narcotic addicts in the United States requires extensive post-withdrawal rehabilitation and other therapeutic services.

The maintenance of stable dosage levels in individuals addicted to narcotics is generally inadequate and medically unsound, and ambulatory clinic plans for the withdrawal of narcotics from addicts are likewise generally inadequate and medically unsound.

As a result of these conclusions the American Medical Association and the National Research Council oppose on the basis of present knowledge such ambulatory treatment plans.

These two organizations support (1) after complete withdrawal, follow-up treatment for addicts, including that available at rehabilitation centers, (2) measures designed to permit the compulsory civil commitment of drug addicts for treatment in a drug-free environment, (3) the advancement of methods and measures toward rehabilitation of the addict under continuing civil commitment, (4) the development of research designed to gain new knowledge about the prevention of drug addiction and the treatment of addicted persons, and (5) the dissemination of factual information on narcotic addiction.

Statement of the Bureau of Narcotics

Mr. Henry L. Giordano, as the Acting Commissioner of the Bureau of Narcotics, issued the following statement today relative to the Joint Statement of the American Medical Association and the National Research Council regarding the narcotic drug addiction problem in the United States:

"The Federal Bureau of Narcotics wishes to express its complete approval of the views contained in the Statement of the American Medical Association and the National Research Council. The Bureau of Narcotics believes that the American Medical Association–National Research Council statement clarifies a subject on which there has been widespread public and professional misunderstanding. The Bureau of Narcotics subscribes completely to the view that the Federal law does not consider drug addiction a crime. The National Research Council and the American Medical Association have performed an outstanding public service which will greatly advance the joint efforts of the law enforcement agencies and medical–health organizations who are charged with the responsibility for dealing with the narcotic drug problem.

"The Bureau is pleased to note that the American Medical Association has reaffirmed its position opposing the establishment of community ambulatory clinics for the withdrawal of narcotics from addicts and the continuing maintenance of addicts on narcotics.

"The Bureau of Narcotics also supports the five measures set out in the last paragraph of the statement of the American Medical Association and the National Research Council which will provide addicted persons with the best possible rehabilitative treatment programs and reduce and, if possible, eliminate narcotic drug addiction."

The Physician of the Future*

The physician of the future—the World Physician—will endeavor to encompass in his study of man the relationships of the numerous and complex forces which surround man. The World Physician will see man "not as a mere numerical quantity in a motley collective mass, not as a bundle of physiological reflexes and psychological complexes, not as a mere biologic entity preyed upon by infectious agents and degenerative disorders, but as man in his existential situation, imposed upon by cultural diversity, stirred and stimulated by ideological differences and religious ideas, in conformance or in rebellion to the demands of society, confronted with the great mysteries of life, with birth and death, with progress and failure, belonging and loneness, finiteness and infinity."

The future Physician of the World must possess an ultimate concern with the meaning of life, with the self-realization of man, with the fulfillment of the task of life. The physician of the future will appreciate the well-evident fact that the duty of the physician toward the individual patient is only one aspect of medicine. The World Physician will assume as a professional and personal credo that the most important aspect of medicine is the formulation of a social philosophy of medicine which reflects the welfare of mankind as a whole. In the endeavor to encompass such a social philosophy it will be necessary for the physician of the future to include in his medical intelligence and wisdom the findings of anthropology, sociology and philosophy.

---

* Editor's note: These remarks were a part of Dr. Comanduras' speech as he accepted one of the three Awards presented to health leaders at the Fifth "Health-U.S.A." Luncheon at the Mayflower Hotel, June 5, 1962. See story on page 424.

"Man lives not by bread alone" and the manner of his dying also varies with his beliefs. The diverse cultures and societies of both East and West have emerged from the deepest wells of the hopes and aspirations of mankind. The common humanity that lies at the very foundations of these differing cultures lies exposed and can easily be found by those who seek.

In what you are doing today you are giving concrete acknowledgment of what the role of the future physician of the world must be: "A one world fit to live in can be discovered only through the common effort of all men—striving to understand each other." The men of medicine extend their hands to people all over the world, hoping that the gesture will be accepted as a token of friendship, of sympathy and understanding. In the achievement of these goals, the hopes of world unity and world peace will be inevitably advanced. In the future, the American physician may well be able to say, "My practice is the world. My patients are all mankind."

PETER D. COMANDURAS, M.D.
Secretary-General, MEDICO,
a Service of CARE

Voluntary Admissions to Saint Elizabeths Hospital

FOR A NUMBER OF YEARS it has been possible for bona fide residents of the District of Columbia (one year of residence) to enter Saint Elizabeths Hospital voluntarily for treatment. Now, through a coöperative arrangement between Saint Elizabeths Hospital and the D. C. Department of Public Health, voluntary patients may be admitted, in emergencies, any time of day and any day of the week. The following information, provided to guide physicians when referring a patient for voluntary admission, was contained in a communication sent to members of the Washington Psychiatric Society, April 11.

The D. C. Department of Public Health, Medical Assistance Division, determines the legal eligibility for the patient's admission and the Hospital is responsible for determining the patient's suitability for voluntary admission. During regular business hours a representative of the D. C. Medical Assistance Division is on duty at the Hospital to ascertain eligibility (her telephone is Johnson 2-4000, ext. 259). At other times a patient may be admitted on a tentative determination of eligibility subject to later final determination by the D. C. representative.

Dr. Winfred Overholser, Superintendent of the Hospital, has pointed out that a telephone inquiry to the Hospital before actually sending the patient there will be most helpful to all concerned. Sometimes the patient's eligibility can be clarified in advance and thus save potential inconvenience to patients and their relatives. It is most helpful if the patient comes to the Hospital with a relative or close friend. In cases of juvenile patients, it is necessary that the parent or guardian accompany the patient.

Patients should be directed as follows:

1. For patients under the age of 64 years:
    (a) Mondays through Fridays, 8:00 a.m. to 4:30 p.m.: Dix Pavilion, South Admission Suite. Telephone Johnson 2-4000, ext. 389.
    (b) Weekends, Federal holidays and weekdays from 4:30 p.m. to 8:00 a.m.: Dix Pavilion, Nursing Supervisor's Office (in main lobby). Telephone Johnson 2-4000, ext. 384.
2. For patients 64 years of age and older:
    (a) Mondays through Fridays, 8:00 a.m. to 4:30 p.m.: Geriatric Service, Clinical Director's Office. Telephone Johnson 2-4000, ext. 392.
    (b) Weekends, Federal holidays and weekdays, 4:30 p.m. to 8:00 a.m.: Geriatric Service, Nursing Supervisor's Office (in main lobby). Telephone Johnson 2-4000, ext. 394.

Annual Report of President of Medical Service*

This is the Fourteenth Annual Meeting of Participating Physicians to be held since Medical Service of the District of Columbia began its operations in 1948. How much has been accomplished during this period is readily illustrated by the fact that our subscriber enrollment, which was about 112,000 at the close of 1948, was over 850,000 at the end of 1961. As 1961 ended, all the Blue Shield Plans combined were protecting nearly 50 million people and more than 25 per cent of the United States population.

This ever-increasing enrollment indicates, I think, that we are keeping pace with our subscribers' growing demand for improved, broader coverage. In the past year we have taken a number of significant steps toward meeting this demand, while at the same time we have continued the effort to coördinate our local benefit structure with the recently revised Federal Employee Program. Such coördination is vital, since approximately one-half of our subscribers are enrolled in the Federal program, which is operated as a special national account.

To illustrate this coördination: The revised Federal program now provides benefits for emergency first-aid treatment within 72 hours of an accident, and the Board of Medical Service has approved this benefit for subscribers enrolled under the Surgical and Surgical-Medical contracts as well. Also, the Medical Service Board has approved the extension of the age limit for children covered under Family Surgical or Surgical-Medical contracts from 18 to 19, in order to conform with the Federal program, which covers children under its Family contract up to age 19.

I must point out, too, another important change which has been made in the Federal Employee Program. It was reported at this meeting last year that the Medical Service Board had petitioned the National Association of Blue Shield Plans to provide benefits for out-of-hospital diagnostic services under the Federal program. This has been accomplished by providing a special supplemental benefit for certain diagnostic tests in a physician's office or in a hospital outpatient department, for charges in excess of $20 for the high option and $25 for the low option in a benefit period.

We are confident that continued improvement in Federal employee benefits has contributed to increased recognition on the part of the Government employee of the outstanding value of the Government-wide service benefit plan which is underwritten by Blue Shield and Blue Cross. Evidence of this recognition was displayed last October when Federal employees were given the opportunity to enroll in the various programs available, or change their enrollment from one program to another. Enrollment in the Government-wide service benefit plan of Blue Cross and Blue Shield increased by over 50,000 contracts, while enrollment in the only other Government-wide plan decreased.

Increased enrollment in the Federal Employee Program, of course, broadens the already considerable impact which that program has had upon Medical Service operations. It also increases the number of subscribers who have Major Medical or supplemental coverage. More than half of the Medical Service enrollment—and nearly one-fourth of the total population of Metropolitan Washington—now is eligible to receive benefits for Major Medical expenses.

Nowhere else is so large a percentage of the population protected against the expense of catastrophic illness or injury, and the trend to enrollment under this form of coverage is a continuing one. Medical Service has encouraged enrollment in Major Medical programs for several years, but now it has taken another long step toward making this type of protection available to even larger numbers of subscribers. The Board of Medical Service recently approved the participation of Medical Service in the provision of Major Medical coverage for selected small groups, some of which may have as few as five employees. During the early years of Major Medical coverage, while we were obtaining experience in this area of protection, we did not offer this coverage to groups of fewer than 20 subscribers.

In connection with this, I should mention that the ability of Medical Service to make Major Medical coverage available on a large scale results, in large part, from the rate structure for Major Medical contracts, wherein the cost to the subscribers in a group is based upon actual utilization of benefits, or

---

* Presented at the Fourteenth Annual Meeting of Participating Physicians of Medical Service of the District of Columbia, May 9, 1962.

"experience" of the group. At the present time, approximately 70 per cent of our enrollment is rated on the basis of experience, and the Medical Service Board has now approved extension of the use of experience rating for all subscribers enrolled in large groups, and in categories of small groups or individual enrollment.

I think that you will readily see that Major Medical coverage represents an increasingly important part of the overall Medical Service program. The fact that more and more people are enrolling under this type of protection, too, places a heavy responsibility upon us as physicians. There are no fee schedules agreed upon for this form of coverage and yet, if subscription rates are to be determined accurately, and public confidence in the medical profession maintained, it must be possible to predict the cost of services. The Medical Society of the District of Columbia has established a Review Board for the purpose of determining reasonable and customary limits for charges for necessary physicians' services in questioned cases. This action illustrates again the close association which exists between Medical Service of D. C. and the Medical Societies of the Washington area—an association which is doubly valuable because it makes it possible for Medical Service to respond to physician opinion and encourages physician participation in the affairs of Medical Service. We must continue to strengthen and develop this coöperative alliance, which has resulted in so many important achievements in the past.

Briefly, then, these have been some of the accomplishments of Medical Service in the past year. Before I pass on to some of our current projects and future plans, however, I should like to give some credit where it is due—and possibly overdue—and express my personal thanks to a few of the people who have aided so much in our efforts of the last 12 months.

First of all, I should like to pay tribute to Read Calvert, Henry Ecker, Fred Heath, Halsey Hunt, Bob McCann, Peter Soyster and Ted Wiprud, all of whom are leaving the Board of Medical Service. These most able gentlemen have given long and devoted service to Medical Service as Trustees and in their committee assignments, and they will be sorely missed.

Next I should like to express, on the part of Participating Physicians and on my own behalf, our heartfelt gratitude to George McGovern, Executive Vice President of Medical Service. George's dedication and devotion to Medical Service throughout its entire life far transcend any verbal laudation I might utter from the podium.

Lastly, I must offer a special thank you to the long-suffering lay members of the Board, who have nobly endured an ear-drubbing of medical terminology throughout 90 per cent of the Board's 8 p.m. to 1 a.m. deliberations. Counting encephalograms and commissurotomies, instead of sheep, offers little relief to the trustee insomniac.

Now for a look at some current projects and future plans.

Let's begin by examining some of our plans for the coming year. The Medical Service Board currently is considering a number of matters which are of significant interest to you. For example, we are studying the extent to which benefits should be provided for the services of a Participating Physician who assists another Participating Physician at surgery, when surgical assistance is not otherwise available. We are also analyzing a change from Group Hospitalization, Inc. to Medical Service of the benefit now provided by Group Hospitalization for the hospital admission urinalysis and blood count; and we are looking into the manner in which payment should be made for anesthesia, X-ray and laboratory services which are billed on the hospital statement and considered by the patient to be hospital services. This last problem is complicated by the fact that the Federal Employee Program provides full coverage for such services when they are billed as hospital services, while Medical Service does not guarantee full coverage for such services except when the subscriber's family income is below the stipulated family income level.

Another subject which the Board is examining is the cost and feasibility of offering a rider to the Surgical-Medical contract which would provide benefits for the physician's care during the first three days of the patient's hospitalization, as well as additional benefits for intensive medical care, prolonged detention, and medical consultations.

During the past year, the Medical Service Board has given thoughtful attention to the adoption of the Professional Services Index for use in national accounts. It should be remembered that, exclusive of the farm population and those who are self-employed, about 65 per cent of the working force in the United States is employed by organizations with locations or installations in more than one state. The Board agreed that means must be found for Blue Shield Plans to offer uniform benefit programs to these national accounts, and it was the conclusion of the Board that the use of a uniform Relative Value Scale to which local conversion factors could be applied would be a valuable aid in developing a uniform national account program which would be understandable and acceptable to the American public.

Conversion factors were applied to the Index to establish local fee schedules for three different sets of income levels, and, after analyzing the Index and its intended use, the Medical Society of D. C. and other medical societies of the Washington area recommended that it be submitted to Participating Physicians for approval. A schedule of surgical procedures which constituted approximately two-thirds of the total surgical expense represented in the Index was submitted to the Participating Physicans and a special meeting was called for March 7, 1962, to discuss the program. Following this meeting, the same schedule of procedures, with additional information designed to answer questions raised at the special meeting, was submitted to the Participating Physicians with a ballot for their use in approving or disapproving the use of the Index for national accounts. Physicians voting on the proposal approved it overwhelmingly, and Medical Service is now in a position to utilize the Professional Services Index in servicing national accounts.

The Professional Services Index has a special application in responding to the challenge which has been offered in recent months to Blue Shield and the voluntary method of prepayment for physician services. The American Medical Association and the National Association of Blue Shield Plans have requested that Medical Service and all other local Blue Shield Plans consider participating in a uniform Blue Shield Program specifically designed for people over the age of 65. It was pointed out in this request that local Plans should utilize the low-level schedule of the Professional Services Index for this national account.

I believe that Medical Service must be prepared to act in connection with both the Senior Citizen Program and utilization of the Professional Services Index. As the Blue Shield Plan for the National Capital Area, Medical Service is thrown into sharp focus in matters which are of concern to many of its companion plans throughout the Nation. We must show the same awareness of our position of leadership and influence among Blue Shield Plans that the medical profession of the Washington Area has displayed in the forward movement of American medicine. These plans want to know how we stand and what we are going to do.

We must be ready to do our part in the Blue Shield Senior Citizen Program when it becomes effective. The Board of Medical Service already has approved the participation of Medical Service in this program, subject to its implementation by the National Association of Blue Shield Plans. However, it is not known how soon the National Association will coördinate the activities of all Blue Shield Plans with respect to the Senior Citizen Program and make an announcement concerning the date the program will go into effect.

This does not mean, however, that we are wholly dependent upon implementation of the program at a national level. The Professional Services Index provides us with one of the tools we need to offer the Senior Citizen Program as a local account, pending its implementation across the Nation. The Board of Medical Service, therefore, recommends that Participating Physicians approve the low-level fee schedule of the Professional Services Index for use with the Senior Citizen Program, in order that it will be available if the program is offered as a local account instead of as a national account. I should like very much for us to consider this subject now.

HENRY L. DARNER, M.D., *President*

Annual Report of Physicians' Services Committee of Medical Service*

The Physicians' Services Committee during the year 1961–1962 has been made up of the following physicians: Dr. Brooks G. Brown, Chairman; Drs. John P. Adams, Joseph Dessoff, John Gallagher, Charles W. Harnsberger, David S. Johnsen, Kenneth L. McCoy, Philip H. Philbin, Hilbert S. Sabin, and Philip P. Steptoe. These men have served in a loyal and conscientious manner, always endeavoring to reach an equitable decision in all claims presented to them. I believe they have accomplished their aim. To them I give my personal thanks as well as the thanks of Medical Service and the physicians whom they represent for a job very well done. I could not want to serve with a better committee.

From June 6, 1961 to March 13, 1962, 352 cases were reviewed. An additional meeting in April 1962 is not included in this number. These cases may be broken down into the following categories:

1. Cases involving multiple surgery for the same condition—24 (14 involved complications)
2. Eligibility questions—8 (2 of these were approved)
3. Cases involving concurrent in-hospital medical care and surgical cases—53
4. Cases requiring the establishing of a fee not in the schedule—54
5. Plastic surgery cases—46
6. Requests for higher fees than paid the physician according to the Fee Schedule—50 (15 of these were allowed higher fees)
7. Cases involving multiple laboratory procedures—88

From the consideration of these cases, a few observations may be made.

1. There is an increasing number of claims for medical care during hospitalization for surgery. The Committee has carefully considered each claim as it is presented and has concluded that most surgical complications are the problems of the surgeon; but that often concomitant medical diseases require the help of internists in assuring the patient's quick and complete recovery, and in such cases claims are allowed.

2. There are times when a patient desires the presence of his family or medical doctor while he is in the hospital for surgical treatment. This is a good service that the doctor performs, but, unfortunately, cannot be covered by Medical Service. It is felt that these patients would gladly pay for this service if they knew the facts before entering the hospital.

3. The problem of payment for multiple laboratory procedures has not yet been resolved to the satisfaction of all but it is hoped that this will soon be accomplished.

4. The Committee has felt that the fees for some operations have needed revision and have recommended to the Fee Committee a reëvaluation of these fees. Consideration has been given to all of our recommendations.

5. Lastly, a good understanding between Participating Physicians and Medical Service must continue for the benefit of patients, physicians and Medical Service.

Brooks G. Brown, M.D., *Chairman*

---

* Presented at the Annual Meeting of Participating Physicians of Medical Service of the District of Columbia, May 9, 1962.

Experience Rating Adopted by GHI and Medical Service

Group Hospitalization, Inc. and Medical Service of D. C. announced, May 17, that the use of experience rating soon will be extended to Blue Cross and Blue Shield subscribers who are not now experience rated.

Mr. F. P. Rawlings, Jr., President of Group Hospitalization, Inc. (Blue Cross) and Dr. Henry L. Darner, President of Medical Service of D. C. (Blue Shield) said the extension of experience rating to all subscribers offers a number of advantages. It will eliminate the need for any future across-the-board rate adjustments for subscribers who are not currently experience rated. Also, subscribers in groups with better than average claims experience will pay less than groups with average or more than average claims experience.

The Boards of Trustees of Washington's Blue Cross and Blue Shield Plans directed this extension "because they believe that the experience rating method is the best and most equitable yet developed to determine the amount subscribers should pay for their health protection," the spokesmen said. Currently, about two-thirds of the subscribers of Group Hospitalization, Inc. and Medical Service of D. C. are experience rated.

The spokesmen explained that under the experience rating system, a separate rate schedule will be calculated for each group of 50 or more subscribers. Groups of fewer than 50 subscribers and subscribers who pay direct will be classified by type of coverage and each classification will be rated as a single large group. Several months will be required to complete the transition to experience rating.

The spokesmen said that under the experience rating system, the claims experience of each group or category of groups will be reviewed at regular intervals. The rates will then be adjusted up or down as necessary.

They stressed that "the community character of the service Group Hospitalization and Medical Service are rendering will be maintained. We shall continue to offer at the lowest possible cost the finest hospital and medical coverage, dollar for dollar, that can be obtained."

George Washington Medical Alumni Dinner

The George Washington University Medical Alumni Association held its Annual Dinner at the close of Alumni Day, June 2, at the Hotel Statler-Hilton, with some 300 alumni and guests attending. Presiding at the dinner program was Dr. Alfred Brigulio, President of the Association. Former Lt. General Elwood R. (Pete) Quesada, now President of the Washington Senators, the principal speaker, made a plea for a sympathetic understanding of the need, in the interests of national defense, for nuclear testing by the Armed Forces of the United States.

Dr. Thomas H. Carroll, President of the University, announced that a bill to provide Federal financing for additional Medical Center construction, with matching University funds, had just been signed by President Kennedy.

The Class of 1912 celebrated its 50th reunion at the dinner. Dr. Daniel L. Borden, who represented the class, gave an excellent accounting (see page 427 of this issue) of the remarkable contribution which this class has made to medicine through its many illustrious members.

Highlight of the evening was the presentation of University chairs to five emeritus members of the faculty. They are: Dr. Errett C. Albritton, Professor Emeritus of Physiology; Dr. Paul F. Dickens, Professor Emeritus of Clinical Medicine; Dr. George B. Roth, Professor Emeritus of Pharmacology; Dr. George Nordlinger, Clinical Professor Emeritus of Obstetrics and Gynecology; and Dr. Roger M. Choisser, Professor Emeritus of Pathology. The presentations were made, respectively, by Drs. Chester E. Leese, Alvin E. Parrish, Angus M. Griffin, John Parks, and Thomas M. Peery.

DR. NORDLINGER HONORED BY ALMA MATER

Dr. George Nordlinger (right) has just been presented the University chair for his long service on the medical faculty of George Washington University by Dr. Alfred Briguglio, President of the Medical Alumni Association. The occasion was the Annual Medical Alumni Dinner at the Hotel Statler-Hilton, June 2.

Dr. Nordlinger received emeritus status at the University's commencement, June 6, after having served as a member of the faculty since 1924, two years after his graduation from the Medical School.

Earlier in the day the Medical Alumni Association held its annual meeting and election of officers for 1962–63. They are:

Dr. William P. McKelway, *President-elect*; Dr. George Speck, *First Vice President*; Dr. Virginia Duggins, *Second Vice President*; Dr. Frank N. Miller, Jr., *Secretary*; Dr. Jerome Epstein, *Treasurer*; Dr. Richard Palmer, *Councilman for three years.*

Dr. Howard E. Ticktin will serve as President of the Association for the coming year.

Membership

The following applicants for membership were duly elected to membership by the Executive Board, May 28, 1962, in accord with Chapter II, Article VIII, of the Constitution and By-laws of the Society.

Active Members

Morton Altschuler, 6101 New Hampshire Avenue, N.E.
Ottavio Gelmi, 1801 Eye Street, N.W.
John G. Hewitt, 1120 16th Street, N.W.
William R. Hix, 1539 North Taylor Street, Arlington, Va.
John A. Kenney, Jr., 1442 Iris Street, N.W.
Oriel C. Morris, 1025 Vermont Avenue, N.W.
John E. Smith, United Airlines Medical Department, Washington National Airport

Associate Members

Peter Y. Evans, Georgetown University Hospital
Austin A. Herr, Jr., 121 North Washington Street, Alexandria, Va.
Colonel Robert C. Hunter, MC, USA, Walter Reed General Hospital

Resident-Intern Member

Ramiro J. Abaunza, George Washington University Hospital

Clinical Center Study of Glycogen Storage Diseases

The coöperation of physicians is requested in obtaining patients with glycogen storage diseases for a study currently in progress at the Clinical Center of the National Institutes of Health in Bethesda, Md.

Patients with deficient glucose-6-phosphatase are especially needed, but patients with the other types are also being studied. Preferably the diagnosis should be established as a result of enzymatic assays on liver biopsy tissue, but patients who fit the clinical criteria for glycogen storage disease would be considered also.

In the glucose-6-phosphatase deficient type there is hepatomegaly, hyperlipemia, hypoglycemia, and no increase in the blood sugar after either epinephrine or glucagon injections. This can be performed by giving either 0.3 ml. 1/1000 epinephrine subcutaneously or 1 mg. glucagon intramuscularly and following blood sugars every 15 minutes for 1 hour. In the types where the liver phosphorylase is deficient, the clinical picture may be the same but there is some rise in the blood sugar after epinephrine or glucagon. Patients with the cardiac variety (Pompe's disease) have cardiomegaly, congestive heart failure, and usually do not survive past one year.

Hospitalization for a period of one to three weeks should be anticipated and various therapeutic measures would be evaluated.

Physicians who wish to have their patients considered for study should write Dr. James B. Field, National Institute of Arthritis and Metabolic Diseases, National Institutes of Health, Bethesda 14, Md.; telephone 496-2715 (area code 301).

1962 "Health-U.S.A." Award-winners

THREE DISTINGUISHED REPRESENTATIVES of the medical and dental professions were honored at the Fifth "Health-U.S.A." Luncheon, sponsored jointly by the Metropolitan Washington Board of Trade and the Medical Society of the District of Columbia, at the Mayflower Hotel, June 5. They were Dr. Howard A. Rusk, Professor and Chairman of the Department of Physical Medicine and Rehabilitation, New York University–Bellevue Medical Center; Dr. Peter D. Comanduras, co-founder of MEDICO; and Dr. Gerald D. Timmons, Dean of the School of Dentistry, Temple University.

The principal speaker at the luncheon, which drew hundreds of civic leaders from all the professions, was the Honorable Durward G. Hall, a physician and Member of Congress from Missouri. Dr. Hall, who proved to be a most entertaining speaker, recalled the tremendous strides which medicine has made in this era, and even since the 1930's. He was introduced by Dr. J. Spencer Dryden, President of the Medical Society of the District of Columbia.

The official welcome was given by Mr. John W.

METROPOLITAN WASHINGTON BOARD OF TRADE
and
MEDICAL SOCIETY OF THE DISTRICT OF COLUMBIA
HONOR: 1962 Recipients of HEALTH-USA AWARD
PETER D. COMANDURAS, M.D.
CO-FOUNDER OF MEDICO
HOWARD A. RUSK, M.D.
IN PHYSICAL MEDICINE AND REHABILITATION
D D. TIMMONS, D.D.S.
Y IN DENTAL EDUCATION
HEALTH
1962 AWARD
U.S.A.
22

RECIPIENTS OF "HEALTH-U.S.A." AWARDS

Dr. Janet Travell, Physician to President Kennedy, is flanked by two of the three 1962 recipients of the "Health-U.S.A." Awards, Dr. Howard A. Rusk (left) and Dr. Peter D. Comanduras.

Thompson, Jr., President of the Metropolitan Washington Board of Trade. Dr. Richard T. Sullivan, General Chairman of the Awards Committee, opened the meeting and introduced the distinguished guests at the head table. Following the address of Dr. Hall, Mr. Julius N. Cahn, of the U. S. Senate Committee on Government Operations, called on Dr. Leroy E. Burney, Vice President of Health Sciences, Temple University, to present the first award to Dr. Timmons. Dr. Timmons, who is President-elect of the American Dental Association, expressed his personal appreciation but accepted the award on behalf of the profession of dentistry.

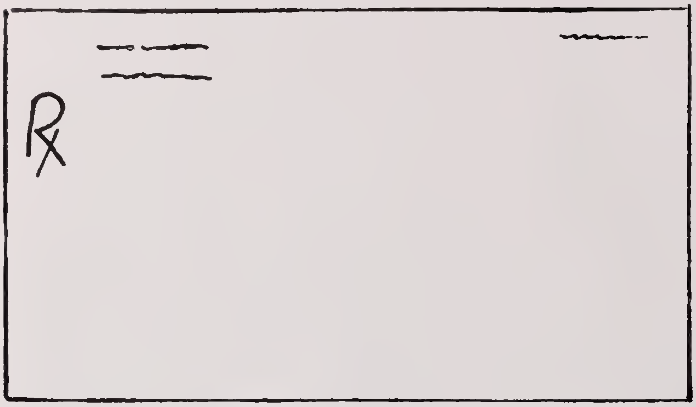
Dr. William J. Walsh, founder and President of Project HOPE, presented the second award to Dr. Comanduras, whom he described as a physician and world citizen, but, above all, a man who has dedicated his life to humanity. MEDICO, which Dr. Comanduras co-founded, is now a part of CARE. Dr. Comanduras responded by reading what he called his concept of the physician of the future—the world physician.

Dr. Donald Stubbs, until recently Chairman of the Board, National Blue Shield, presented the third award to Dr. Rusk. Dr. Rusk, he said, has received almost every honor available in the way of awards and citations. He noted that he had lived three lives—16 years in the practice of internal medicine in St. Louis, Missouri; a Colonel in the Medical Corps of the Army Air Force during World War II, when he originated and directed the Army Air Force Convalescent Rehabilitation Training program, for which he was awarded the Distinguished Service Medal. He is currently a Brigadier General in the U. S. Air Force Reserve. During his "third life," covering more than a decade, he has studied and developed rehabilitation services in 37 countries. Dr. Stubbs substituted for Senator Lister Hill, of Alabama, who was unable to be present but sent a congratulatory telegram to Dr. Rusk which was read by Dr. Stubbs.

In a brief response, Dr. Rusk recalled his coming to Washington in 1942 from Brookfield, Mo., to set up a program in rehabilitation for disabled veterans of the Armed Forces. After the War he decided to dedicate his life to the assistance of physically handicapped civilians, who outnumber the disabled veterans twelve to one. Medicine, he said, is a common language which knows no curtains or barriers.

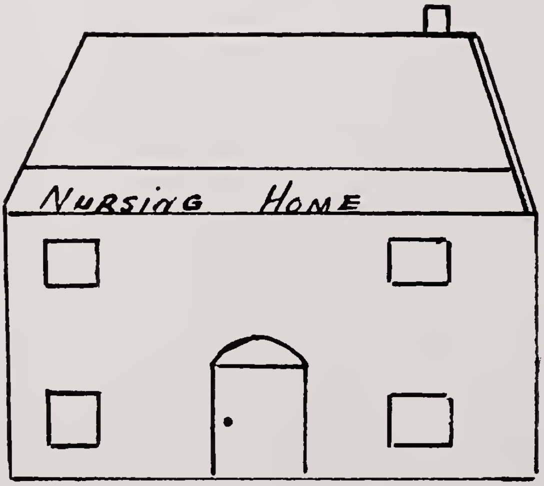
Before adjourning, recognition was given to all those who had had a part in the success of the Luncheon this year. Special mention was made of Dr. Sullivan, General Chairman, Dr. Oscar B. Hunter, Jr., Past General Chairman, Mr. Cahn, and Mr. Ralph E. Becker, Director of the Metropolitan Washington Board of Trade. From the Medical Society, recognition was given particularly to Drs. Frank S. Ashburn, W. LeRoy Dunn, and Milton Greenberg, and the retiring Secretary of the Society, Mr. Theodore Wiprud.

Services for Your CANCER PATIENTS



Financial aid for District of Columbia residents, up to $50 per month, for the purchase of MEDICATIONS is available *upon application by the physician.*

The Visiting Nurse Association, aided by a grant from the American Cancer Society, provides *home nursing care*. This service may be obtained by calling the Visiting Nurse Association directly.



$100 a month toward care in a *Licensed Nursing Home* is available for D.C. residents. This is on a monthly basis and not to exceed three months.

Other services offered include sickroom equipment, dressings, Homemaker service, and transportation. There is *no* charge for these services. For further information

Call or Write

American Cancer Society
District of Columbia Division, Inc.
810 18th Street, N.W.
Washington 6, D.C.
EXecutive 3-3690

The Roll Call of the Medical Class of 1912*
George Washington University

DANIEL L. BORDEN, M.D., F.A.C.S.

Professor Emeritus of Clinical Surgery, George Washington University School of Medicine

FIVE DECADES AND FOUR YEARS AGO the Medical Class of 1912, 34 strong, met in the halls of the School of Medicine under the deanship of Dr. W. F. R. Phillips. Of the original class 27 ultimately graduated.

One year earlier (1907) the Night or Five Year Medical Class of 1912 matriculated. This class, the last of its type, was composed mostly of mature age Government employees, attending classes and receiving their medical education before and after their working hours. Of their original 27 members but eight survived the medical curriculum.

Thus we began in the days when automobiles were in their infancy and were started by hand cranks. Cars were equipped with kerosene lights and isinglass side curtains, with a restricted speed limit of 12 miles an hour. Policemen rode bicycles instead of motorcycles. Income tax was unknown, radios unheard of, and the tempo of life progressed rather than raced. Restraint of trade and socialized medicine were in the unforseeable future. It was an era of peace, well before foreign dictators and world wars marred the horizon. Physicians' fees were one to two dollars a call, and the profession was viewed as an honorable but poor man's vocation.

The medical faculty, all clinical teachers serving without financial compensation, totaled 81 in number. Of these but two remain, Dr. Charles Stanley White, Dean of Surgery in this community, Emeritus Professor of Surgery and Trustee of the University, and Dr. Edgar P. Copeland, former Clinical Professor of Pediatrics and now Emeritus Chief of Staff of the Children's Hospital. The names of D. K. Shute, A. F. A. King, Sterling Ruffin, William Cline Borden, J. Wesley Bovée, Frederick Russell, Charles W. Richardson, Francis R. Hagner, William J. Mallory, B. M. Randolph, and all the others left their mark of influence upon us. The memory of these men recalls our absolute faith, high esteem and respect with which we held them. They lived by and taught the principles enunciated in The Oath of Hippocrates.

During these past two score years and ten the concept of medical teaching has changed radically to full-time preclinical and clinical instructors in association with part-time teachers, so that the present faculty now numbers over five hundred.

Two World Wars are history, and we find ourselves in a period of impelling uncertainty. Our University during the past half century has seen six presidents, two acting presidents and four deans of the Medical School pass in succession.

Reviewing the history of those who graduated in 1912 has entailed research of all available records, but time and death have obscured many that could not be traced.

Of the final Night Class of 1912 but one man remains in our midst, Dr. George F. Leonard, now retired (1949) and living in New Jersey. Half of the Night Class continued in Government service, after graduation, one of whom, the only woman physician, Dr. Effie Read, remained as assistant to the late Dr. Harvey Wiley of Pure Food fame.

Another member of this class, Dr. Everett M. Ellison, was a brother of the present Chairman of our Board of Trustees. Dr. Ellison, who directed his efforts in the field of general practice, was unusually gifted as a public speaker.

Of the 27 Day Class members, seven survive. It is of interest to note that at least four members married nurses, perhaps a natural sequence of propinquity.

One member of the Class, now dead, was the only one to cast discredit upon himself and the University. He was a transfer student who did not come under the influence of the faculty for the full four years. All of the remainder of the Class fulfilled their respective responsibilities true to the dignity of their profession.

In the field of education six men attained professorial rank in institutions of higher learning, and five became executive heads of their respective departments.

Four of our classmates entered military service as a career. During World War I a majority of the class volunteered for active duty in the Armed Forces, and eight were again in uniform in World War II. Five attained the rank of Colonel, and two the corresponding grade of Captain in the Navy. The highest military recognition reached by any member of the Class was that of Rear Admiral, United States Navy.

---

* Read at the George Washington University Medical Alumni Association Dinner at the Hotel Statler-Hilton in Washington, D. C., June 2, 1962.

Two of the Class each lost a son in World War II and the son of another member was severely wounded, interrupting his study of medicine.

During his student days Nicholas J. Scarito, an ordained Baptist Minister, organized the First Italian Baptist Church in Washington. Now deceased, he leaves a daughter, a doctor of medicine in her own right.

George Sparr Lucket, former President of the Class in his senior year, became Professor of Hygiene at Stanford University and co-author of a textbook, entitled "Elements of Public Administration."

Augustus Clagett Gray, wearer of the Purple Heart, was wounded in World War I while serving with the British Expeditionary Force in France. During World War II, with the rank of Colonel, he was Deputy Director of Selective Service for the District of Columbia and was awarded the Army Commendation medal. Still active, he is now Medical Advisor to Group Hospitalization, Inc.

Across the Potomac, Colonel Munson Corbett (1913), of Virginia, now retired, became Professor of Military Science and Tactics in our University. During World War II he was Executive Officer at Walter Reed General Hospital. It is of interest to note that his father and my father were classmates at our University in the Medical Class of 1883, 79 years ago.

William Otis Bailey, Virginia gentleman and father of Dr. W. O. Bailey, Jr., of this city, is still active in the field of otolaryngology. From student days he will always be remembered for his philosophical approach to our many problems. His keen analysis with an unexpressive facial reaction was and still is unique.

Albert Elwood Pagan interned at Columbia Hospital and devoted his practice to gynecology and obstetrics. In World War II he attained the rank of Captain in the United States Navy.

Sacks Bricker, plastic surgeon in the City of Brotherly Love, was former Chief of Staff of the Albert Einstein Medical Center of Philadelphia.

Charles Caldwell Landis became a missionary in China, where he was made Superintendent of the Red Cross General Hospital in Shanghai.

Louis B. Castell, father of Dr. Richard Castell, was a pioneer in the field of endocrinology and was reported as being the first doctor in this community to take up this specialty.

Albert M. Cram, at his home in Vermont, was honored as the private physician to Calvin Coolidge, a former President of the United States.

John C. Eckhardt became Director of the Bureau of Preventable Diseases of the District's Department of Health.

Louis Anatole LaGarde, son of the former ballistic expert of the Army, entered the Medical Corps of the United States Army as a career, reaching the grade of Lt. Colonel before his untimely death.

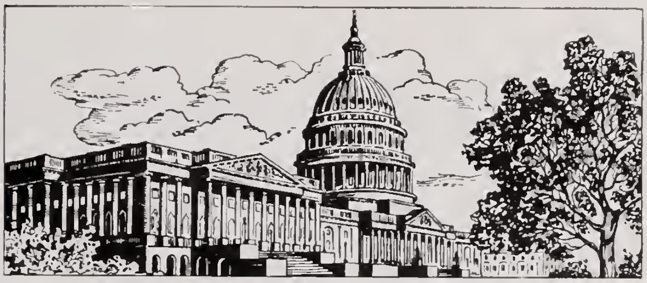
J. Irving Sloat had an illustrious military career. He is the wearer of the Legion of Merit and the former Chief of the Orthopedic Service at the Walter Reed General Hospital. He is now active as Director of the Canan-Kip Clinic in San Francisco.

Custis Lee Hall, honored by a foreign government, was Past President of the United States Chapter of the International College of Surgeons and Past President of the George Washington University Medical Society. As the former Professor of Orthopedic Surgery, he was for 17 years the Director of the Crippled Children's Clinic under the sponsorship of the Kiwanis Club of Washington.

Howard Francis Kane, decorated by Great Britain, was taken prisoner of war by the Germans in World War I while serving with the British Expeditionary Army. He was the holder of many honors and known to his Alma Mater before his death as Emeritus Professor of Gynecology and Obstetrics. He was the editor of *Review of Gynecology and Obstetrics* and co-originator of the so-called Portwine Cocktail containing therapeutic-paraldehyde which induced the widely publicized twilight sleep as an aid in obstetrics.

George W. Calver, Rear Admiral, U.S.N., with a distinguished naval career, is now Attending Physician to the Congress of the United States. He is Past President of the American College of Cardiology, Past President of the Pan American Medical Society, and holds other honors too numerous to recount.

(*Continued on page 436*)



NEWS & PERSONALS

General News

The Executive Board of the Medical Society of the District of Columbia met for its regular monthly meeting on May 28, with Dr. James W. Watts, Chairman, presiding. Mr. George W. Cooley, who took over officially as Secretary of the Medical Society on July 1, was elected Acting Treasurer to succeed Mr. Theodore Wiprud, the present Treasurer, effective June 16.

The Board voted to contribute, as it has in the past, $100.00 to the Washington Convention and Visitors Bureau for 1962–63.

The Constitution and By-laws of the new District of Columbia Association of Medical Assistants was approved by the Board, following recommendation for approval by Dr. Paul R. Wilner, Chairman of the Committee on Public Information and Education.

The Board voted that Mr. Nate Haseltine, Science Reporter for *The Washington Post*, be recognized for his excellent medical news coverage.

Because it had been ascertained that some Associate members are holding offices in Sections of the Medical Society, the Board requested that the Secretary advise the Sections that only Active and Life members of the Society may hold offices in the Sections.

A motion was made and carried that the Chairman of the Executive Board address a letter to Dr. Herbert P. Ramsey, who was General Chairman of the Theodore Wiprud Testimonial Dinner, and thank him "for his tireless efforts" in connection with the Dinner.

Two committee changes were approved, namely, the appointment by President Dryden of Dr. Luther Gray to the Review Board for Prepaid Medical Insurance and the resignation of Dr. Ernest A. Gould from the Committee on Public Policy.

President Dryden reported that several communications had been received by him from officers of the Student American Medical Association thanking the Society for its encouragement and assistance with the recent SAMA Convention, held at the Mayflower Hotel, May 9–13.

Dr. Henry L. Darner has been reëlected **President of Medical Service of the District of Columbia.** Other officers reëlected were Mr. Robert M. Holmes, First Vice President; Mr. Douglas R. Smith, Treasurer; and Mr. George B. McGovern, who is Executive Vice President, Secretary. Dr. F. Preston Titus was elected Second Vice President, succeeding Dr. Henry D. Ecker.

Newly elected members of the Board of Trustees are Drs. Titus, Alfred Brigulio, John S. Haught, William H. Stewart, Mr. Charles K. Stott, and Mr. Howard West. Trustees reëlected were Drs. Frank S. Pellegrini and Leonard T. Peterson, and Messrs. Holmes, Smith, and Philip M. Talbott.

More than 856,000 area residents are now enrolled in Medical Service, Washington's Blue Shield plan.

Two Sections of the Medical Society of the District of Columbia have recently elected new officers. The **Section on Radiology** has elected the following slate:

Dr. Alfred A. J. Den, *Chairman*; Dr. William E. Sheely, *Chairman elect*; and Dr. Martin A. Thomas, *Secretary Treasurer*.

The following officers will serve the **Section on Internal Medicine and Allied Subspecialties:**

Dr. Alban W. Eger, *Chairman*; Dr. Paul Jaquet, *Vice Chairman*; Dr. John J. Hughes, *Secretary*; Dr. Thomas E. Curtin, *Treasurer*; Drs. Alfred Brigulio and Joseph J. Wallace, *members of the Executive Committee.*

The Clinical Center of the National Institutes of Health has published a new revision of **"Current Clinical Studies and Patient Referral Procedures."** The publication describes briefly the diagnostic requirements, purposes and methods of those studies expected to be most active during the current year. Most of the clinical research programs have been in progress for several years in the 516-bed research hospital on the NIH grounds in Bethesda, Md. Physicians desiring to receive a copy of the publication should write to Dr. Jack Masur, Director of the Clinical Center, NIH, Bethesda 14, Md.

A communication from the new **National Library of Medicine** announces that **regular guided tours** are available to visitors, Monday through Friday, at 10:30 a.m. and 2:30 p.m., except on legal holidays. Interested organizations, groups and individuals are asked to register in advance for tours by writing or calling Mrs. Alice E. Luethy, Office of the Director, National Library of Medicine, 8600 Wisconsin Avenue, Bethesda 14, Md., telephone 656-6221.

Georgetown University School of Medicine has received a grant of $150,000 from the Josiah Macy, Jr. Foundation of New York for the purpose of alleviating problems of recruitment and retention of Medical School teaching-research staff, particularly in the basic sciences. In all other respects, however, there are no restrictions on its use, according to Dr. Willard C. Rappleye, President and Acting Medical Director of the Foundation. The grant will extend over a three-year period, beginning July 1, 1962, $50,000 to be received each year.

Copies of **"Classification of Headache,"** prepared under the direction of the National Institute of Neurological Diseases and Blindness, is available upon request from the Information Office of the Institute, Bethesda 14, Md. Designed to assist medical practitioners, as well as research investigators, the classification was published in the *Journal of the American Medical Association*, May 3, 1962, and in the *Archives of Neurology*, March, 1962.

Following a meeting of the Board of Trustees, May 22, at the **Washington Hospital Center,** plans were announced for the erection of a research facility which will be designed as a memorial to the late George Hyman, President of the George Hyman Construction Company. The building will be erected at builder's cost by the George Hyman Construction Company, and will be financed by Mrs. Hyman and the Washington Hospital Center, plus a $25,000 grant from the National Institutes of Health. The total cost is expected to be $800,000. The building may be ready for occupancy this fall.

The Washington Academy of Surgery elected new officers at its annual business meeting, May 14. They are:

Dr. Saul Schwartzbach, *President*; Dr. Philip A. Caulfield, *Vice President*; Dr. Frank J. Sanzaro, *Secretary-Treasurer*; Dr. Joseph Rogers Young, *Assistant Secretary-Treasurer*; Drs. Brooks G. Brown, Philip H. Philbin, and Robert S. Smith, *members of the Executive Council.*

At the same meeting the co-winners in its Annual Scientific Essay Contest were announced and a check of $100 each presented to Dr. Reuben Torti, Resident in Surgery at the Washington Hospital Center, and Dr. Kahlil Shebander, Research Fellow in Surgery at Prince Georges General Hospital.

Newly elected officers of the **Washington, D. C. Dermatological Society** are:

Dr. Marc Allen Weiner, *President*; Dr. Peter N. Horvath, *First Vice President*; and Dr. Wendell M. Willett, *Secretary-Treasurer.*

The Northern Virginia Academy of Ophthalmology was organized recently by ophthalmologists of Northern Virginia, representing Falls Church, Arlington, Fairfax, and Alexandria. Dr. Thomas E. Haggerty was elected President, Dr. Albert Long, Vice President, and Dr. M. Mendel Bochnek, Secretary-Treasurer.

The purpose of the Academy is to "foster the professional standards of ophthalmology in the Northern Virginia area by providing a medium for the exchange of ideas and experiences." The Academy will lend assistance to the County Medical

Societies, the respective school boards, and the County Health Departments in the problems of eye care.

The Sisters of the Holy Cross Governing Board of the new **Holy Cross Hospital of Silver Spring, Md.,** has appointed the following Medical Advisory Committee: Dr. Peter N. Lombard, Chairman; Drs. John B. Brady, Merrill M. Cross, Blaine H. Eig, John P. Haberlin, Henry W. Jaeger, Stephen N. Jones, Marvin I. Mones, and J. Thomas Schnebly. Most of these physicians are Affiliate or Associate members of the D. C. Medical Society.

Dr. James A. Curtin has been named **Director of Research and Medical Education for the Washington Hospital Center,** succeeding Dr. Thomas W. Mattingly, who has been named Chairman of the Department of Medicine.

Dr. Curtin is a graduate of the University of Buffalo School of Medicine. Prior to the appointment he has been Assistant Professor of Medicine and Microbiology at the Georgetown University School of Medicine since 1959. Dr. Curtin will coördinate the research activities of the Hospital Center, which will be housed in the new George Hyman Memorial Research Building.

Mr. Edwin J. Holman has been appointed **Secretary of the Council on Medical Service of the American Medical Association,** succeeding Mr. George W. Cooley. Mr. Holman assumed his new duties on May 1. He also will serve as Director of the Department of Medical Service.

Dr. Wilhelm C. Hueper, head of the environmental cancer section of the National Cancer Institute, was one of seven cancer specialists awarded United Nations prizes by the World Health Organization in Geneva, according to an announcement, May 16. He will share a $10,000 prize with Mr. Leon M. Shabad, head of the cancer research department of the Soviet Academy of Medical Sciences.

Dr. Frank Mate, Jr. was appointed **Director of the Retarded Children's Clinic at Georgetown University Hospital,** effective April 1. Dr. Mate is a graduate of the George Washington University School of Medicine, with residency training in pediatrics at Buffalo Children's Hospital. He has been associated with the Retarded Children's Clinic since July, 1961.

Mr. James E. Bryan has been appointed the **first Executive Secretary of the American Medical Writers' Association,** effective July 1. The offices will be maintained at 250 West 57th Street in New York City. Mr. Bryan will continue to serve as Executive Secretary of the American Federation for Clinical Research and the National Medical Foundation for Eye Care.

Dr. George F. Evans, of Clarksburg, West Virginia, has been named Editor of *The West Virginia Medical Journal.* He succeeds the late Dr. Walter E. Vest, of Huntington, who died, January 28. Dr. Evans has served as an Associate Editor of the *Journal* since 1956.

Personals

Dr. Worth B. Daniels was awarded an honorary Doctor of Science degree by Georgetown University at its commencement, June 4. Dr. Daniels is Clinical Professor of Medicine at Georgetown, where he has served on the faculty since 1936. He is an alumnus (1924) of Johns Hopkins University School of Medicine.

Georgetown's ceremonies this year were enlivened by a guest speaker, Leslie Towns, better known as the comedian Bob Hope, who was awarded the honorary degree of Doctor of Humane Letters for "unstinting generosity with his gift of laughter."

Dr. George E. Schreiner, Professor of Medicine at Georgetown University School of Medicine, has taken office as President of the American Federation for Clinical Research.

Dr. Schreiner has been appointed a member of the National Research Council to serve from 1962 to 1965.

Lt. General Leonard D. Heaton, Surgeon General of the Army, was awarded an honorary degree of Doctor of Science by the University of West Virginia at its 93rd commencement on June 4. General

PRINCIPALS AT THE CARDIAC SYMPOSIUM

DR. PAUL DUDLEY WHITE (center), distinguished cardiologist, gave the opening lecture at the Cardiac Symposium in the D. C. Medical Society's auditorium, April 25. With him are DR. W. PROCTOR HARVEY (left) AND DR. JAMES M. MOSS, of Alexandria, Va., Co-chairmen of the Symposium, which was sponsored jointly by the Heart Association of Northern Virginia and the Washington Heart Association.

Heaton, a native of Parkersburg, West Virginia, received his medical degree from the University of Louisville, Ky. He is an Honorary member of the Medical Society of the District of Columbia.

Vice Admiral Joel T. Boone, MC, USN (**Ret.**) was honored by the Mercersburg (Penna.) Academy, which has named its newest building the Joel T. Boone Auditorium. Admiral Boone, an Honorary member of the D. C. Medical Society, served as physician to three Presidents of the United States—Presidents Harding, Coolidge and Hoover. He was Medical Director of the Veterans Administration from 1951 to 1955, and still serves as consultant in medical affairs to the Veterans Administration.

Dr. Benjamin Newhouse was presented with a certificate by the University of Maryland, at its commencement, June 7, attesting to his completion of fifty years of medical service.

Dr. Allen S. Cross, Medical Officer of the United States Government Printing Office, was elected Vice President of the Council of Federal Medical Directors for Occupational Health at its meeting in Baltimore, Md., April 5. This organization is a group of policy-making physicians from all the principal Government agencies.

Dr. Walter Lester Henry has been appointed by the District of Columbia Commissioners to fill the unexpired term of Dr. Herbert P. Ramsey on the Hospital Advisory Council. Dr. Ramsey resigned from the Council last December. Dr. Henry's term will expire December 16, 1962.

Dr. James M. Moss, an Associate member of the D. C. Medical Society, has been appointed to the Editorial Board of the *Virginia Medical Monthly.*

Dr. William R. Claytor and Dr. James E. Abell were certified, April 14, in the specialty of obstetrics and gynecology by the American Board of Obstetrics and Gynecology. Dr. Abell, of Hyattsville, Md., is an Associate member of the D. C. Medical Society.

Dr. Lawrence E. Lilienfield was elected a member of the American Society for Clinical Investigation, April 30.

Dr. Edward D. Freis has been elected to membership in Alpha Omega Alpha, national medical fraternity.

Obituaries

DAVENPORT WHITE, Ph. B., M.D.

(1879–1962)

Dr. Davenport White, a Life member of the Medical Society of the District of Columbia, died, February 9, 1962, after a long illness. His home was at 2400 North Powhatan Street in Arlington, Virginia.

Dr. White was born in Columbus, Ohio, on May 8, 1879. After graduating from Yale University in 1901, he enrolled for the study of medicine at the College of Physicians and Surgeons, Columbia University, receiving his medical degree in 1905. He interned at Bellevue Hospital for two years. He was Attending Physician at Vanderbilt Clinic from 1908 to 1912, and continued his training in obstetrics and gynecology at Sloane Hospital for Women, 1912–13, both units now of the Columbia-Presbyterian Medical Center.

He began practice in the District of Columbia in 1913. Dr. White was elected to Active membership in the Medical Society of the District of Columbia in 1914, and became a Life member in 1954.

His wife, Mrs. Maude Lambert White, died in 1946.

JOHN ALTON REED, A.B., M.D., F.A.C.P.

(1898–1962)

Dr. John A. Reed, nationally known leader in the field of diabetes and Chairman of the District of Columbia Board of Police and Fire Surgeons since 1945, died suddenly, June 7, 1962 at the Police and Fire Clinic. He had served on the Board for 33 years.

During his entire practice Dr. Reed had maintained his offices at 1720 Connecticut Avenue, N.W., where he was associated with the late Dr. William J. Mallory, who retired in 1946, at which time Dr. Reed moved his residence to the same address.

Dr. Reed was born in Altoona, Pa., July 19, 1898, to George and Bessie Reed. Most of his life was spent in the District of Columbia, where he attended public schools, graduating from Central High School in 1916. In 1959, at the annual Alumni Reunion of "Old Central," he was honored as "an outstanding graduate."

Dr. Reed graduated from George Washington University School of Medicine in 1922, following which he interned and served as resident physician at the University Hospital. A few years later (1928) he received the degree, Bachelor of Arts, from the same University.

A specialist in internal medicine, he devoted much of his professional career to the study and treatment of diabetes. He was Past President of the Diabetes Association of the District of Columbia. In 1957 he was elected President of the national American Diabetes Association, of which he was a founding member, having served previously two terms as Vice President and six years as Secretary. When he relinquished the office of President, he was awarded the ADA's highest honor, the Banting Medal.

Dr. Reed was formerly a member of the National Advisory Arthritis and Metabolic Diseases Council of the National Institutes of Health, and formerly consultant in diabetes to the U. S. Civil Service Commission. From 1941 to 1946, during the War years, he served as a member of the Medical Advisory Board of the Selective Service Commission. He was a member of the Commission on Chronic Illness from 1950 to 1953.

JOHN A. REED, M.D., F.A.C.P.

He has served on the staff of George Washington University School of Medicine since 1944, and for many years as Assistant Clinical Professor of Medicine. He was consultant in diabetes to Sibley and Doctors Hospitals.

Dr. Reed was a Fellow of the American College of Physicians, a member of the American Medical Association, the American Gastroenterological Association, and the American Association for the Advancement of Science. He was a diplomate of the American Board of Internal Medicine. He was elected to Active membership in the Medical Society of the District of Columbia in 1924. He was a member and Past President of the George Washington University Medical Society and the Galen-Hippocrates Medical Society, and a member of the Washington Academy of Medicine and the Pan American Medical Society. He was also a member of the National Press Club, the Cosmos Club, the Congressional Country Club, and the Masonic Lodge, Washington Centennial. Dr. Reed had written extensively for publication in the medical journals, most of his articles having to do with diabetes.

His wife, Mrs. Emma Ball Reed, died several years ago. He is survived by one son, John A. Reed, Jr., of Orlando, Florida.

BENJAMIN KARPMAN,
Ph. G., A.B., M.A., M.B., M.D.

(1887–1962)

Dr. Benjamin Karpman, psychiatrist and formerly senior psychotherapist at St. Elizabeths Hospital, died, May 17, 1962. He was widely known for his interest in the problems of antisocial and deviant behavior. This interest led him to the treatment of many criminals in the belief that proper psychiatric treatment of offenders would cure them of their socially unaccepted tendencies. He was considered one of the country's best informed men on the causes and treatment of abnormal sexual behavior.

Dr. Karpman was born in Slutzk, Russia, January 31, 1887. He became a United States citizen in 1917. His undergraduate studies were pursued at Columbia University in New York and at the University of North Dakota. His three degrees in medicine were received from the University of Minnesota, his doctorate in 1920. He interned at St. Elizabeths Hospital in Washington and continued on its staff as senior medical officer; he became Chief Psychotherapist in 1948.

Dr. Karpman was the author of a number of books: "Case Studies in the Psychopathology of Crime," published in four volumes; also "The Individual Criminal," "The Alcoholic Woman," "Objective Psychotherapy," "The Sexual Offender and His Offenses," and "The Hangover." His bibliography in the field of psychiatric literature is an extensive one.

Since his retirement he had devoted himself to private practice at 1801 Eye Street, N.W. and to lecturing. He was editor of the *Archives of Criminal Psychodynamics.*

Dr. Karpman was a diplomate of the American Board of Psychiatry and Neurology, a Fellow of the American Psychiatric Association, an Active member of the Medical Society of the District of Columbia since 1944, and a member of the American Medical Association, the American Orthopsychiatric Association, and many other professional organizations.

Surviving him are his wife, Mrs. Manuela L. Karpman, of the home address, 4419 42nd Street, N.W.; a daughter, Mrs. Olga Hemler, of the same address; another daughter, Mrs. Daniel Duggan, of Kensington, Md.; and a son, Dr. Stephen Karpman, also a psychiatrist, stationed in San Francisco with the Navy. He also leaves a brother, Alexander Karpman, of Washington, and three sisters, Mrs. Edward Wainger and Mrs. Alice Seley, of Washington, and Mrs. Marion Kaplan, of New York City.

WILLIAM NASON HEFFNER,
A.B., M.D.

(1913–1962)

Dr. William N. Heffner, a former member of the Medical Society of the District of Columbia, died, March 14, 1962 at Smith Island, Md., where he was engaged in general practice.

Dr. Heffner was born in Gilbertville, Mass., September 9, 1913, to the late Dr. William J. Heffner, who had served as psychiatric consultant to the Veterans Administration, and Mrs. Katherine O'Mealey Heffner. He attended public schools in New York and Washington, D. C. He graduated from Duke University in 1936 and from Georgetown University School of Medicine in 1940. The following year he interned at Emergency Hospital.

Dr. Heffner rendered distinguished service during World War II as Captain in the Medical Corps of the 29th Division. He served for four years, mostly in the European theater, winning the Silver Star, the Purple Heart, the Bronze Arrowhead and Bronze Star, Presidential Citation, the Croix de Guerre, and other decorations.

After the War Dr. Heffner opened an office for general practice in Washington, D. C. He moved to Knoxville, Tennessee in 1955, and later to Oklahoma before taking the Smith Island assignment.

He was an Active member of the Medical Society of the District of Columbia from 1946 to 1950. During those years he was also a member of the American Medical Association, the Georgetown Clinical Society, and the American Academy of General Practice.

His wife, Mrs. Rae Heffner, died last December. He leaves two young stepdaughters, Molly and Patricia.

Acute Renal Failure—Falkiewicz

(*Continued from page 398*)

specific problems relating to the surgical patient. A continuous close watch is mandatory, and preferably skilled personnel should handle the management of these cases. Fatal errors can be made by the premature relaxation on the part of the clinician; Merrill[21] states that 25 per cent of patients die in the diuretic phase. Hemodialysis offers the best hope to the patient who fails to show early improvement; although many continue to succumb even during or after dialysis, those who live would in early years have been those who died.

The author wishes to express his gratitude to Drs. George E. Schreiner and John F. Maher of Georgetown University Hospital, Renal and Electrolyte Division, for their helpful criticism of this paper.

REFERENCES

1. Winton, R. F.: AMA Arch. Intern. Med., 1959, **103**, 495.
2. Fine, J., and others: New Engl. J. Med., 1959, **260**, 214.
3. Hardaway, R. M., III, McKay, D. G., and Williams, J. H.: Amer. J. Surg., 1954, **87**, 41.
4. Binder, L. S., Ginsberg, V., and Harmel, M. H.: Surg. Gynec. Obstet., 1959, **108**, 19.
5. Thompson, W. W.: Ann. Surg., 1959, **149**, 235.
6. Merrill, J. P.: New Engl. J. Med., 1952, **246**, 17.
7. Moore, F. D.: Metabolic Care of the Surgical Patient. Philadelphia: Saunders, 1959.
8. Ladd, M.: Renal Sequelae of War Wounds in Man; Final Report to the Army Medical Service Graduate School, Washington, D. C., 1954, chap. 6.
9. Franklin, S. S., and Merrill, J. P.: New Engl. J. Med., 1960, **262**, 711 and 761.
10. Strauss, M. B., and Raisz, L. G.: Clinical Management of Renal Failure. Springfield, Ill.: Thomas, 1956.
11. Breed, E. S., in Mulholland, J. H., Ellison, E. H., and Friesen, S. R., editors: Current Surgical Management II. Philadelphia: Saunders, 1960, p. 269.
12. Bywaters, E. G. L.: J.A.M.A., 1944, **124**, 1103.
13. Schreiner, G. E., and Maher, J. F.: Uremia: Biochemistry, Pathogenesis and Treatment. Springfield, Ill.: Thomas, 1961.
14. Rath, C. E., Mailliard, J. A., and Schreiner, G. E.: New Engl. J. Med., 1957, **257**, 808.
15. Kelemen, W. A., and Kolff, W. J.: AMA Arch. Intern. Med., 1958, **102**, 871.
16. Terchan, P. E., and others: Clin. Res., 1959, **7**, 280.
17. Balch, H. H., in Current Surgical Management II: See ref. 11.
18. Schloerb, P. R., in Current Surgical Management II: See ref. 11.
19. Stein, A. A., and Wiersum, J.: J. Urol., 1959, **82**, 271.
20. Balch, H. H., Meroney, W. H., and Sako, Y.: Surg. Gynec. Obstet., 1955, **100**, 439.
21. Merrill, J. P.: The Treatment of Renal Failure: Therapeutic Principles in the Management of Acute and Chronic Uremia. New York: Grune, 1955.

Procaine as Anti-infectious Agent—Foley

(*Continued from page 401*)

4. Lambin, S., and Bernard, J.: Sterility test of injectable official alkaloid solutions. Ann. Pharm. Franc., 1953, **11**, 336.
5. Hatnisch, H., and Lammers, T.: Clinical significance of antibacterial properties of procaine and hydroxyprocaine. Arzneimittelforsch., 1953, **3**, 589; discussion of paper of Hirsch and Werner and their reply. Ibid., p. 592.
6. Muller, F., and Gutierrez: (Spanish Patent 231, 799) Antibiotic compositions for preservation of organic materials, Feb. 20, 1957.
7. Goldschmied, A., Bardach, J., and Lissnerows, M.: Effect of procaine on diphtheria toxemia in guinea pigs. Bull. Acad. Polon. Sci., Classe II, 1956, **4**, 127.

Isopregnenone—Chang

(*Continued from page 405*)

2. Bishop, P. M. F., Borell, U., Diczfalusy, E., and Tillinger, K-G.: Effect of isopregnenone on human endometrium and ovarian activity, in press.
3. Bishop, P. M. F., Tillinger, K-G., Diczfalusy, E., and Borell, U.: Studies on a new class of orally active progesterone analogues (retrosteroid) in amenorrheic women, presented before the First International Congress of Endocrinology (see ref. 1), No. 462.
4. Tillinger, K-G., and Diczfalusy, E.: Progestational activity of steriosomeric progesterone analogues following oral administration in amenorrhea. Acta. Endocr., 1960, **35**, 197.

5. Scholer, H. F., Reerink, E. H., and Westerhof, P.: Pharmacological properties of some 9β 10α steroid hormones (retrosteroid), presented before the First International Congress of Endocrinology (see ref. 1), No. 461.
6. Becker, M. H.: Isopregnenone (Duphaston), a progestational agent, in press.

Skull Surgery by Prehistoric Man—Podolsky

(*Continued from page 413*)

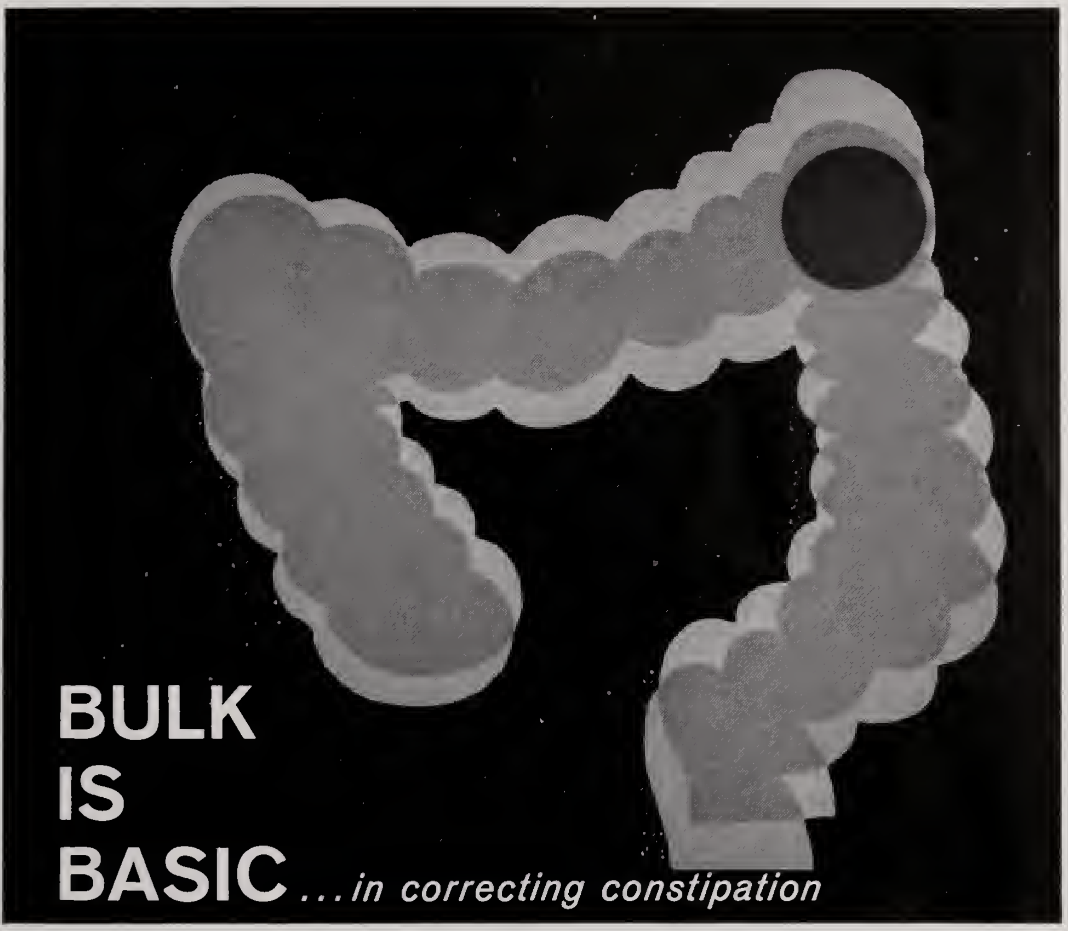
31. Giot, P. R., and Desse, G.: Presse Méd., 1950, **58,** 1283.
32. Ella, S.: Med. Times, London, 1874, **1,** 50.
33. Ford, E.: Med. J. Aust., 1937, **2,** 471.
34. Bishop, W. J.: The Early History of Surgery. London: Robert Hale Ltd., 1960.
35. Lastres, J. B., and Cabieses, F.: An. Fac. Med. Lima, 1959, **42,** 258 and 457.
36. Fernández-Enríquez, V. E.: Ibid., 1950, **33,** 394.
37. MacCurdy, G. C.: Amer. J. Phys. Anthrop., 1923, **6,** 217.
38. Zahm, J. A. (H. J. Mozans, ps.): Along the Andes and Down the Amazon. New York: Appleton, 1911.
39. Bingham, H.: Nat. Geog. Mag., 1915, **27,** 172.
40. Corlett, W. T.: The Medicine Man. Springfield, Ill.: Thomas, 1935.
41. Quevedo, S. A.: La Trepanación Incana en la Región del Cuzco. Rev. Univ., No. 85. Cuzco, 1944.
42. Courville, C. B., and Abbott, K. H.: Bull. Los Angeles Neurol. Soc., 1942, **7,** 107.
43. Manouvrier, L.: Bull. Soc. Anthrop. Paris, 4 ième ser., 1895, **6,** 357.
44. Weiss, P.: Rev. Mus. Antrop. y Arqueol. Lima, 1955, **2,** 3.

Roll Call of Medical Class of 1912—Borden

(*Continued from page 428*)

Oscar B. Hunter, reported as "the most dynamic man in Washington medicine," was Vice President of the American Medical Association at the time of his sudden death, Past President of the Southern Medical Association, second largest medical organization in the United States, Past President of the District of Columbia Medical Society, the George Washington University Medical Society, George Washington University Alumni Association, the International Medical Club, one time acting Dean of our Medical School, and one of the founders of Doctors Hospital, with three degrees from his Alma Mater. Truly a great self-made man of tremendous attainment and drive.

So the story is told. The Class of 1912 looks back over a period of service, fully conscious of the debt that it owes to the University that made its contribution possible. It also looks to the Class of 1962 to "carry on" in the doctrine so inherent to the principles prescribed by the Great Physician. You of the Class of 1962 are about to embark upon a fascinating and rewarding professional career. Our thoughts and best wishes go with you. Let the traditions of the past be an anchor to windward for the security of our University.



METAMUCIL®

BRAND OF PSYLLIUM HYDROPHILIC MUCILLOID

STRENGTHENS THE COLONIC REFLEX

"The natural stimulus to peristalsis[1] ... is the distension of the intestinal wall...."

The effectiveness of Metamucil in correcting constipation is a direct result of its physiologic action.

The stimulus which initiates the defecatory reflex is the fecal mass in the lower sigmoid colon and rectum. Metamucil provides that mass as a bland, nonirritating, easily compressed bulk, similar in consistency to the normal protective mucus of the colon.

Taken regularly, Metamucil tends to correct the insensitive reflex of a bowel abused by laxatives and to restore the natural responsiveness to the urge to stool.

Metamucil is available as Metamucil powder in 4, 8 and 16-oz. containers and as lemon-flavored Instant Mix Metamucil in cartons of 16 and 30 single-dose packets.

1. Best, C. H., and Taylor, N. B.: The Physiological Basis of Medical Practice, ed. 6, Baltimore, The Williams & Wilkins Company, 1955, p. 578.

G. D. SEARLE & CO.
CHICAGO 80, ILLINOIS

Research in the Service of Medicine

ESTABLISHED 1873

WOMEN ASSISTANTS

In Washington and Suburbs

CALL COLUMBIA 5-7023
(Six Trunk Lines)

The S. H. Hines Company

Funeral Home

2901-03-05-07 FOURTEENTH STREET N.W.
Northeast corner Harvard and 14th Streets

W. R. FRANK HINES
President and General Manager

MODERN AIR-CONDITIONED ROOMS WITH CHAPEL, PIPE ORGAN AND REPOSING ROOMS ARRANGED TO MEET EVERY REQUIREMENT AT NO ADDITIONAL CHARGE. CREMATIONS.

No forfeiture of VETERAN'S BURIAL ALLOWANCE
THE EXPENSE IS A MATTER OF YOUR OWN DESIRE

No Branch Establishments
Convenient parking facilities adjoining Funeral Home

for the
tense
and anxious
patient . . .

Sustained tranquilization without autonomic side reactions

- SAFE, CONTINUOUS RELIEF of anxiety and tension for 12 hours with just one capsule — without causing autonomic side reactions and without impairing mental acuity, motor control or normal behavior.
- ECONOMICAL for the patient — daily cost is only a dime or so more than for barbiturates.

Meprospan®-400

400 mg. meprobamate (Miltown®) sustained-release capsules

Usual dosage: One capsule at breakfast lasts all day; one capsule with evening meal lasts all night

Available: *Meprospan-400*, each blue-topped capsule contains 400 mg. Miltown (meprobamate). *Meprospan-200*, each yellow-topped capsule contains 200 mg. Miltown (meprobamate). Both potencies in bottles of 30.

WALLACE LABORATORIES / *Cranbury, N. J.*

If you have patients on a cholesterol depressant diet, this will be welcome news:

General Mills is now making available, through grocery stores, a Safflower Oil which is totally acceptable in the diet, and which is priced reasonably.

SAFF·O·LIFE

Safflower Oil

14 FL. OZ
Betty Crocker
saff-o-life
Safflower
Oil
...poly-unsaturated
for salads, baking, frying
Freshness preserved with BHA, BHT, propyl gallate, citric acid in propylene glycol
General Mills

As you know, Safflower Oil is higher in poly-unsaturates and lower in saturated fats than any other type of readily available vegetable oil.

When an increased poly-unsaturated fatty acid intake is desirable, you can recommend Saff-o-life Safflower Oil. You can do so with the assurance that the patient will find it completely appetizing—clear, light and fresh-smelling—and priced at a level which poses no problem.

Ratio of Linoleates* to Saturates
*(Poly-Unsaturates)

SAFFLOWER OIL • 9.0 to 1.0
CORN OIL • 5.3 to 1.0
SOYBEAN OIL • 3.5 to 1.0
COTTONSEED OIL • 2.0 to 1.0
PEANUT OIL • 1.6 to 1.0

Physicians who wish recipes using Saff-o-life Safflower Oil are invited to write directly to General Mills, Inc. Address your inquiries to Professional Services Director, General Mills, Inc. Dept. 120, 9200 Wayzata Blvd., Minneapolis 26, Minnesota.

The Milibis® vaginal suppository is soft and pliant as a tampon. It offers proved therapeutic action* in an exceptional vehicle. The suppository is clean, odorless and non-staining. The course of treatment of vaginitis (trichomonal, bacterial and monilial) with Milibis is short — only 10 suppositories in most cases. Milibis® vaginal suppositories are supplied in boxes of 10 with applicator.

Winthrop LABORATORIES
New York 18, N. Y.

*97 per cent effective in a study of 564 cases;
94 per cent effective in a study of 510 cases.

Milibis (brand of glycobiarsol),

ENDOCRINE AND PHARMACEUTICAL PRODUCTS OF QUALITY
Organon

An important announcement
to physicians who prescribe
corticosteroids

Organon's new technical process now makes one of the newer, most highly potent and well tolerated corticosteroids available at greatly reduced cost to your patients with allergic, arthritic or other inflammatory conditions.

This new product is being marketed under the trade name of HEXADROL, brand of dexamethasone 'Organon'. HEXADROL is now being offered to your pharmacist at a price which should make it available to your patients at a cost well within the price range of older generically prescribed corticosteroids. It is supplied as 0.75 mg. white scored tablets, in bottles of 100.

If you have been prescribing the older corticosteroids— such as prednisone, prednisolone, hydrocortisone or cortisone, and have hesitated to prescribe the newer corticosteroids because of economic consideration for your patients, you can now secure all of the clinical advantages of dexamethasone at approximately the same prescription expense. Mg. for mg., HEXADROL is approximately 6 times more potent than triamcinolone or methylprednisolone...8 times more potent than prednisone or prednisolone...28 times more potent than hydrocortisone...and 35 times more potent than cortisone.

If you are now prescribing the newer corticosteroids— such as triamcinolone, betamethasone, paramethasone or another brand of dexamethasone, because of reduced risk of sodium and fluid retention, potassium depletion, or disturbance of glucose metabolism – you can obtain all of these benefits with HEXADROL, at marked savings – yet with complete assurance of unsurpassed quality and therapeutic effect.

For complete information concerning HEXADROL— including indications, dosage, precautions and side effects – or if you would like a trial supply, ask your Organon Representative, or write to: Director, Professional Services, Organon Inc., West Orange, N. J.

'Organon'—your professional assurance of quality
Hexadrol®—your patient's assurance of economy!

BOOK REVIEWS

Modern Concepts of Hospital Administration. Joseph Karlton Owen, B.S., M.S., Ph.D., and Robert K. Eisleben, B.A., M.A. Price, $16.00. Pp. 823, illustrated. Philadelphia: Saunders, 1962.

The editor, a well known specialist in hospital administration, felt that there was a need for a one-volume book which would provide an outline for action by all members of the hospital administrative team.

The book deals primarily with concepts and principles and is divided into 11 parts and some 50 chapters, each headed by a picture of the contributor and a short biographical sketch.

The contents of this book represent the pooled ideas of a symposium of about 100 medical and nonmedical personnel on the many phases of hospital administration. A number of the contributors and members of the editorial board, both foreign and domestic, are authorities in the field of hospital administration and enjoy an international reputation.

The contents cover hospital trends both here and abroad, hospital care, administration services, patients' physical needs, patients' diagnostic and therapeutic needs, patients' emotional and spiritual needs, continuing care in convalescent homes and at home, hospital law and public relations, financing hospital care, education and research, current trends in administration, trusteeship, the role of the administrator, information concerning the American Hospital Association, Canadian Hospital Association, American Academy of Medical Administrators, American College of Hospital Administrators, and the relationship of the administrator and the planning and construction teams.

The book contains some controversial issues and statements which one would expect to find in this period of rapid evolution and where everyone has an idea on the care of the sick.

The inclusion of additional information relative to physical standards for hospital employees, in view of recent court decisions on compensation, such as a heart attack at home, would be a valuable asset in future editions.

The editors, editoral board and contributors have accumulated a wealth of information on the timely subject of hospital administration.

C. R. Ball, M.D.

A Textbook of Obstetrics. Duncan E. Reid, M.D. Illustrated by Edith Tagrin. Price, $18.50. Pp. 1087, with 437 illustrations. Philadelphia: Saunders, 1962.

This book, by the Professor of Obstetrics at the Harvard Medical School, is a welcome addition to the field of obstetric texts. It is a general textbook of obstetrics, appropriate for use both by students and practitioners. Its organization is similar to that of other standard works in the field, dealing first with the normal and, second, with the abnormal. It appears to be well indexed. The illustrations are adequate; the print is a very readable size; and the two column pages make for easier perusal than the unbroken page of type.

There are two features to this book which are outstanding. The first is an obvious, and successful, attempt to reduce statistics to a minimum. In so doing the author has made a highly significant improvement over other standard texts. Much emphasis is placed upon pathologic physiology in clear, fundamental terms with excellent bibliographies at the end of each chapter.

The second outstanding feature is the degree to which the subject matter has been correlated with other branches of medicine. The book is up-to-date factually and stimulating in its presentation of present-day problems and how they interrelate with other parameters in medicine.

The more practical or manipulative aspects of the specialty are dealt with objectively and without great bias. There are, no doubt, always going to be differences of opinion among practitioners over such matters as analgesia and anesthesia. The author has presented such problems in a clear, practical way.

The book is a happy marriage of the scientific and practical aspects of the specialty. This reviewer recommends it without hesitation as an excellent standard text of obstetrics.

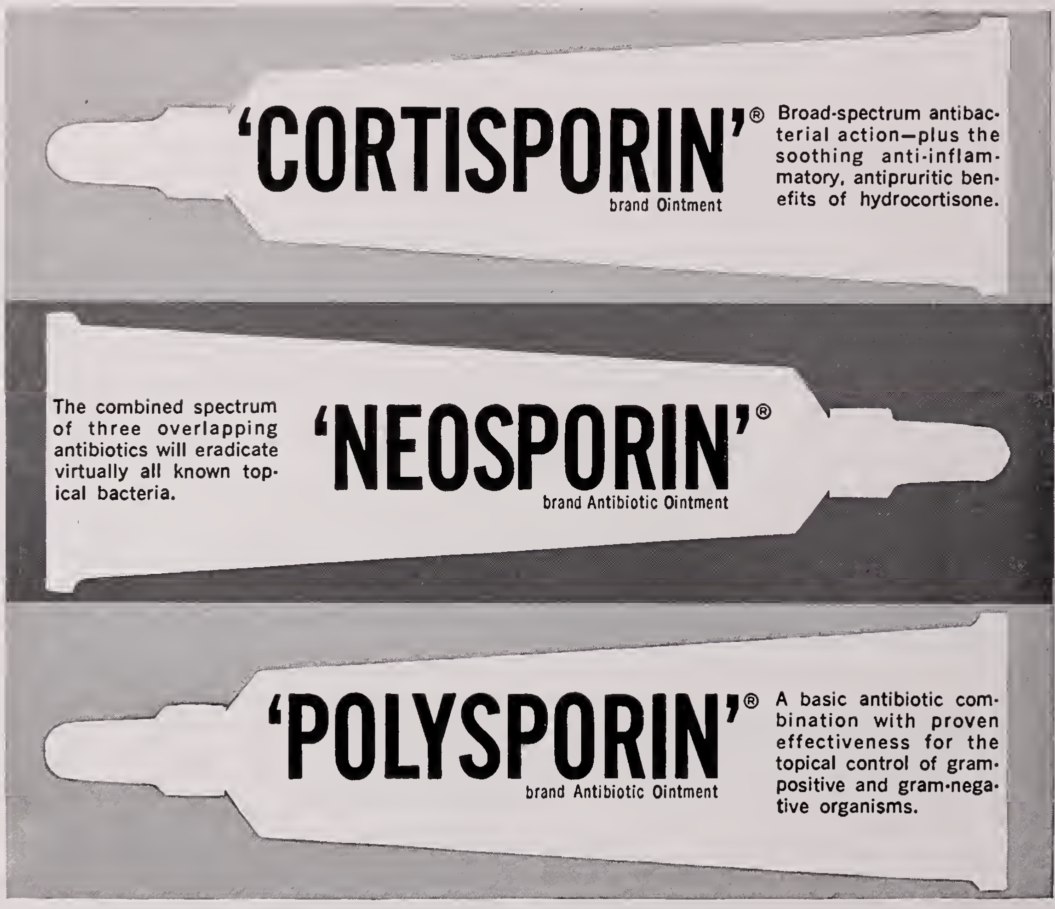
Lee W. Davis, M.D.

Ciba Foundation Study Group No. 11. The Mechanism of Action of Water-soluble Vitamins. A. V. S. deReuck, M.Sc., D.I.O., A.R.C.S., and Maeve O'Connor, B.A., Editors for the Ciba Foundation. Price, $2.50. Pp. 120, with 34 illustrations. Boston: Little, 1962.

This small volume includes the manuscripts presented by a group of preëminent enzyme chemists at a conference held in April of 1961 on the mechanism of enzyme action involving coenzymes related to nicotinic acid, pyridoxine, folic acid, thiamine and biotin. As is usual in this series of volumes, discussion following each paper is recorded and has a synergistic value for reader and participant alike. The collection is not for the clinician, since little attempt is made to prepare the uninitiated with regard to historical and background material or for the vernacular which has grown up in the field of enzyme mechanisms. For the enzyme chemist, several of whom have been consulted with regard to this book, it is an impressive, useful, timely and stimulating collection of papers in an area of biochemistry which is now blooming.

Ruth Kerr Jakoby, M.D.

‘B. W. & Co.’ ‘Sporin’ Ointments
rarely sensitize . . .
give decisive bactericidal action
for most every topical indication


‘CORTISPORIN’®
brand Ointment
‘NEOSPORIN’®
brand Antibiotic Ointment
‘POLYSPORIN’®
brand Antibiotic Ointment

Broad-spectrum antibacterial action—plus the soothing anti-inflammatory, antipruritic benefits of hydrocortisone.

The combined spectrum of three overlapping antibiotics will eradicate virtually all known topical bacteria.

A basic antibiotic combination with proven effectiveness for the topical control of gram-positive and gram-negative organisms.

Contents per Gm.	‘Polysporin’®	‘Neosporin’®	‘Cortisporin’®
‘Aerosporin’® brand Polymyxin B Sulfate	10,000 Units	5,000 Units	5,000 Units
Zinc Bacitracin	500 Units	400 Units	400 Units
Neomycin Sulfate	—	5 mg.	5 mg.
Hydrocortisone	—	—	10 mg.
Supplied:	Tubes of 1 oz., ½ oz. and ⅛ oz. (with ophthalmic tip)	Tubes of 1 oz., ½ oz. and ⅛ oz. (with ophthalmic tip)	Tubes of ½ oz. and ⅛ oz. (with ophthalmic tip)

BURROUGHS WELLCOME & CO. (U.S.A.) INC., Tuckahoe, New York

**Emotional control regained...a family restored...
thanks to a doctor and 'Thorazine'**

During the past seven years, 'Thorazine' has become the treatment of choice for moderate to severe mental and emotional disturbances because it is:

- specific enough to relieve underlying fear and apprehension
- profound enough to control hyperactivity and excitement
- flexible enough so that in severe cases dosage may be raised to two or three times the recommended starting level

Experience in over 14,000,000 Americans confirms the fact that, in most patients, the potential benefits of 'Thorazine' far outweigh its possible undesirable effects.

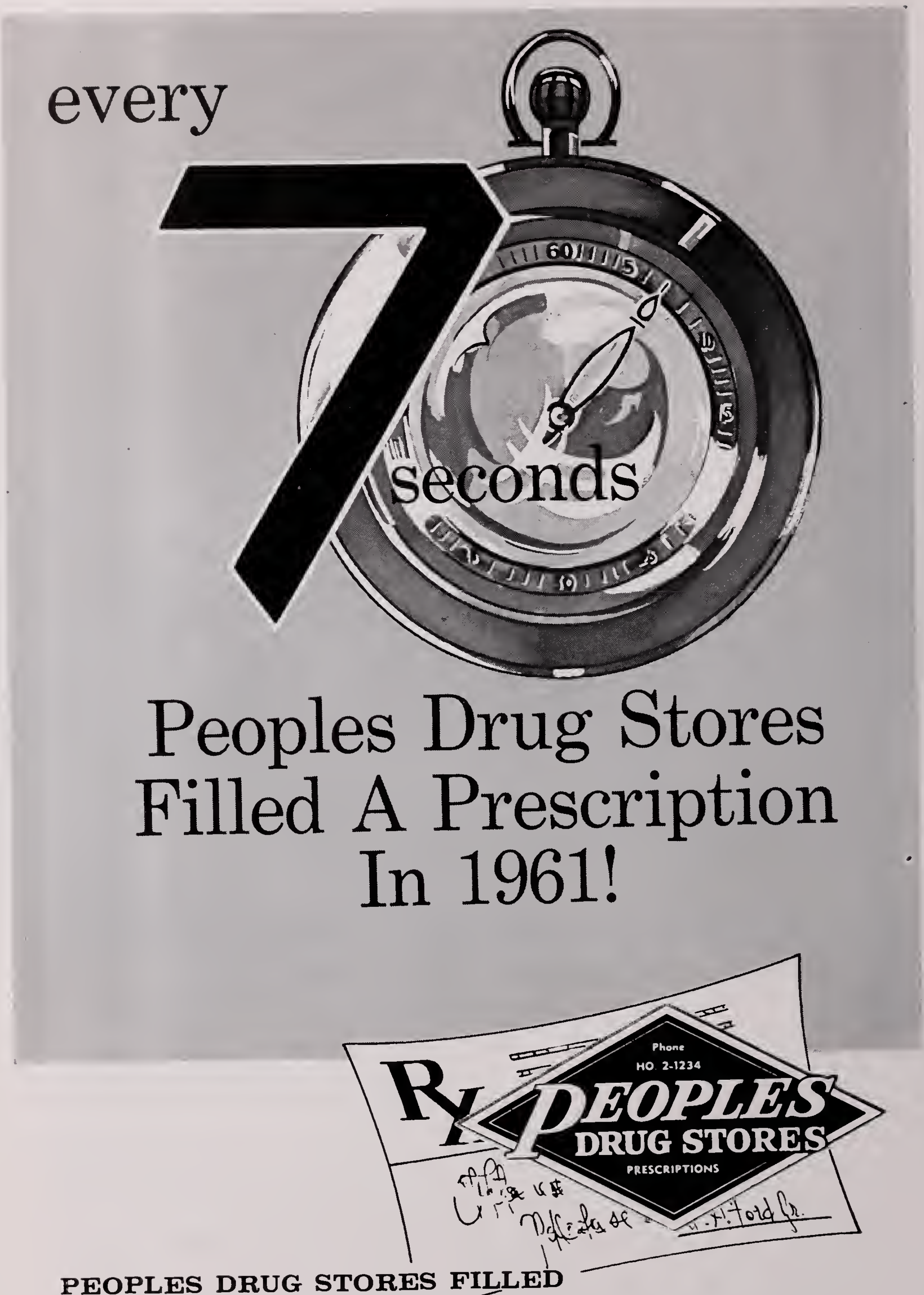
Smith Kline & French Laboratories SK&F

Thorazine®
brand of chlorpromazine

A fundamental drug
in both office and hospital practice

Posed by professional models.

For prescribing information, please see PDR or SK&F literature.


every
7
seconds
Rx
Phone
HO. 2-1234
PEOPLES
DRUG STORES
PRESCRIPTIONS

Peoples Drug Stores
Filled A Prescription
In 1961!

PEOPLES DRUG STORES FILLED

4,424,474 PRESCRIPTIONS IN 1961

There's nothing like a vacation* for easing stress-induced smooth muscle spasm

...nothing, that is, except autonomic sedation with

DONNATAL®

Prescribed by more physicians than any other antispasmodic

Natural belladonna alkaloids plus phenobarbital

*This one at Mirror Lake, Yosemite Park

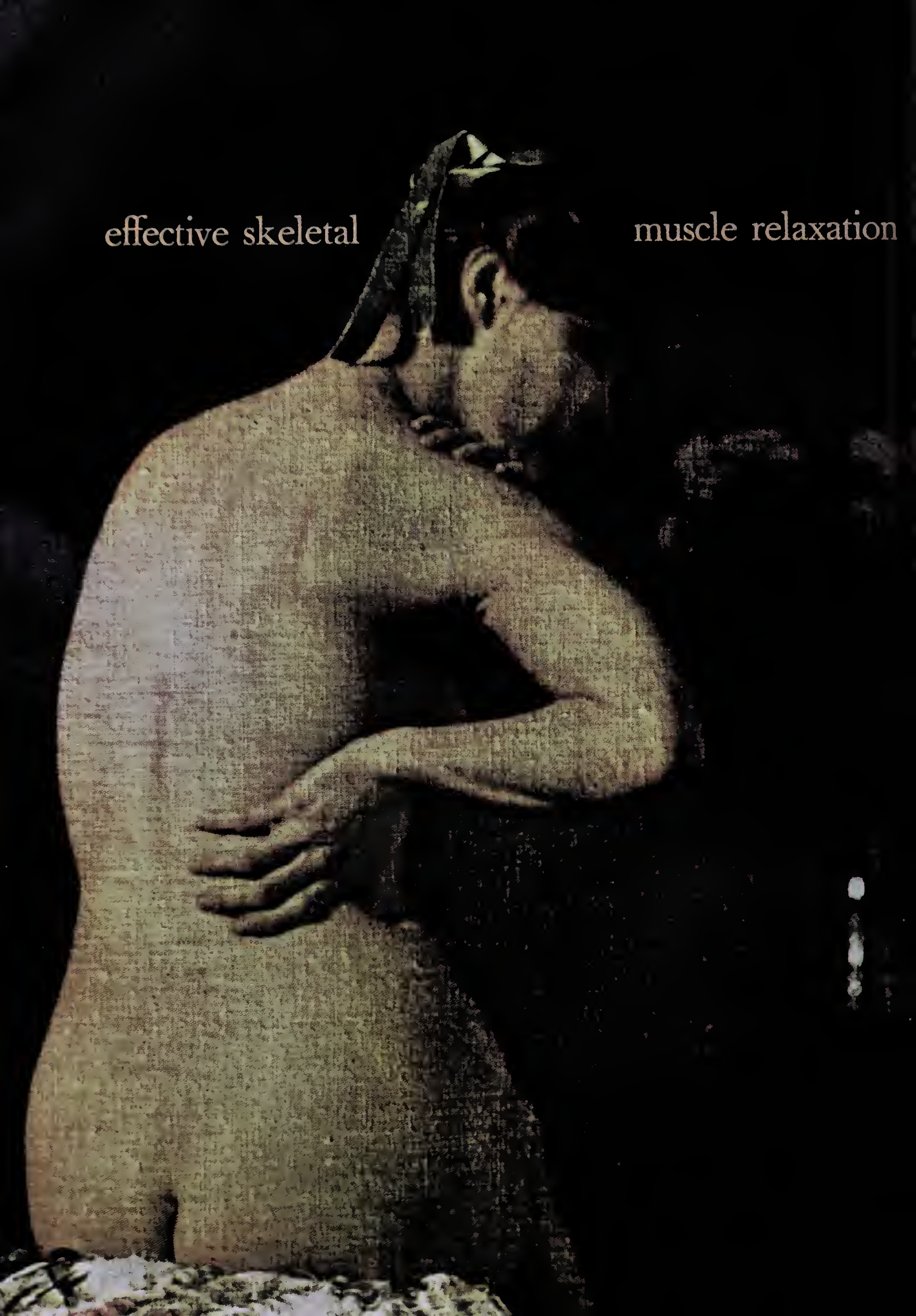
In each DONNATAL Tablet, Capsule or 5 cc. Elixir		In each DONNATAL Extentab
0.1037 mg.	hyoscyamine sulfate	0.3111 mg.
0.0194 mg.	atropine sulfate	0.0582 mg.
0.0065 mg.	hyoscine hydrobromide	0.0195 mg.
16.2 mg. (¼ gr.)	phenobarbital	(¾ gr.) 48.6 mg.

Robins

A. H. ROBINS CO., INC. • Richmond, Virginia

DONNATAL tablets • capsules • elixir
— for an easily adjusted t.i.d. or q.i.d. dosage regimen.

DONNATAL EXTENTABS®
— for day-long or night-long benefits on a single dose.


effective skeletal muscle relaxation

as each patient may require

—for dramatic promptness: ROBAXIN INJECTABLE usually provides relaxation of painful spasm *in minutes.* Clinicians have reported that it is "effective in producing immediate relaxation,"[7] and brings about "dramatic relief of pain and spasm" within 15 to 20 minutes.[3]

In each 10-cc ampul Methocarbamol (Robins) 1.0 Gm.

—for prolonged use with safety: ROBAXIN TABLETS safely maintain relief of spasm *without drowsiness.* "The effect does not wax and wane,"[4] and continued administration shows "no deleterious effect on normal muscle tone."[6]

In each white, scored tablet Methocarbamol (Robins) 0.5 Gm.

ROBAXIN® Robins

Robaxin is methocarbamol (Robins) U. S. Pat. No. 2770649

—for concurrent analgesia: ROBAXISAL TABLETS, combining ROBAXIN with aspirin, are useful in spasm-triggering states that are painful in themselves, or when pain is prominently associated with muscle spasm.

In each pink-and-white laminated tablet Methocarbamol (Robins) 400 mg.
Acetylsalicylic acid (5 gr.) 325 mg.

—for concurrent analgesia plus sedation: ROBAXISAL-PH TABLETS, combining ROBAXIN with the sedative-reinforced analgesic PHENAPHEN®, are particularly helpful in giving comprehensive relief to patients in whom muscle spasm is accompanied by spasm-potentiating pain and apprehension.

In each green-and-white laminated tablet

Methocarbamol (Robins)	400 mg.	Acetylsalicylic acid (1¼ gr.)	81 mg.
Phenacetin	97 mg.	Hyoscyamine sulfate	0.016 mg.
		Phenobarbital (⅛ gr.)	8.1 mg.

ROBAXISAL® Robins

References: 1. Carpenter, E. B.: South. M. J. 51:627, 1958. 2. Hudgins, A. P.: Clin. Med. 8:243, 1961. 3. Lamphier, T. A.: J. Abdomin. Surg. 3:55, 1961. 4. Levine, I. M.: Med. Clin. N. America 45:1017, 1961. 5. Meyers, G. B., and Urbach, J. R.: Penna. M. J. 64:876, 1961. 6. Perchuk, E., Weinreb, M., and Aksu, A.: Angiology 12:102, 1961. 7. Poppen, J. L., and Flanagan, M. E.: J.A.M.A. 171:298, 1959. 8. Schauhel, H. J.: Orthopedics 1:274, 1959. 9. Steigmann, F.: Am. J. Nursing 61:49, 1961.

A. H. ROBINS COMPANY, INC. • Richmond, Virginia

control the two-headed dragon of *pain & spasm*

"HIGH THERAPEUTIC EFFECT"

A growing library of clinical reports on the use of ROBAXIN in painful skeletal muscle spasm continues to reaffirm its effectiveness, dependability, rapidity of action, and lack of significant side effects.

Some recent comments:

"... high therapeutic effect ..."[5]

"... superior to other relaxants ..."[9]

"... remarkably effective ..."[2]

"... a high potential for prompt relief ..."[8]

"... unusual freedom from toxicity ..."[1]

THE MARCHING CHILDREN

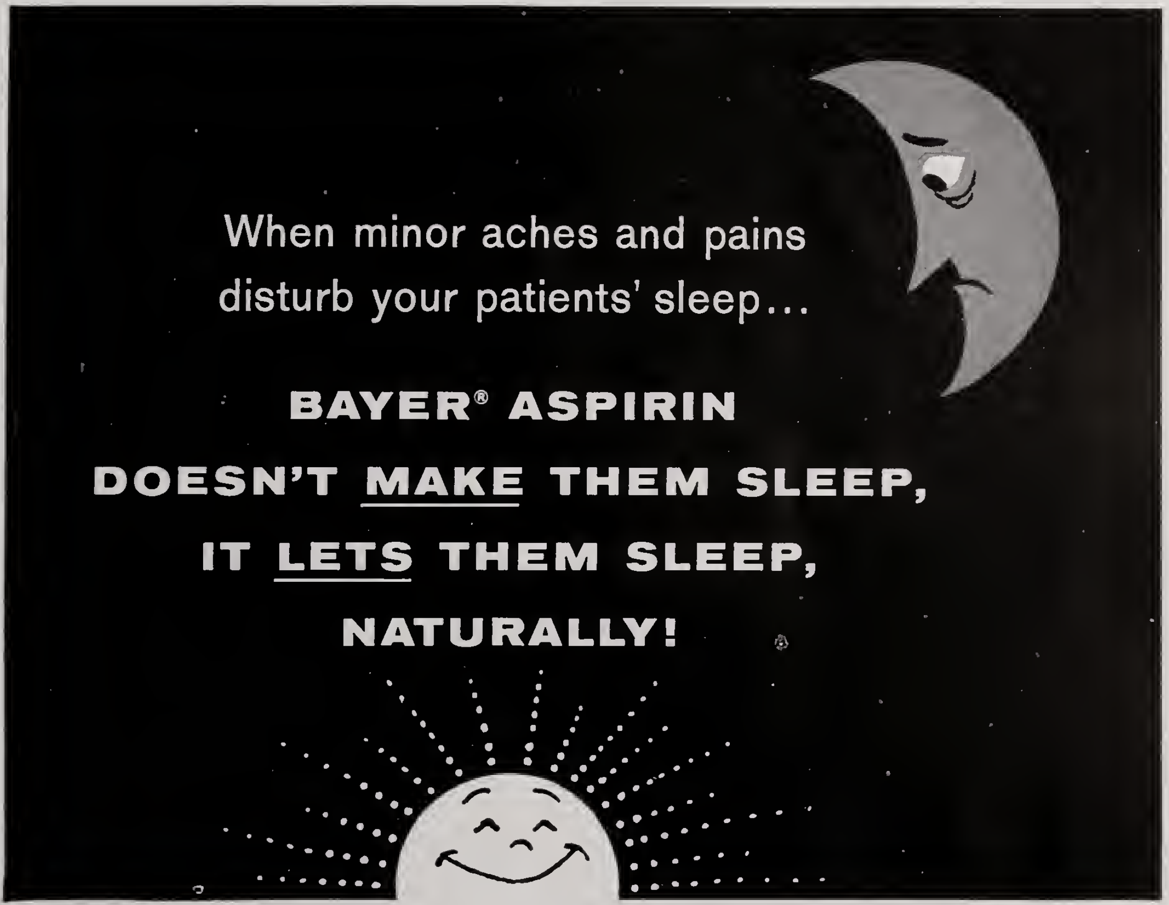
How long would it take 500,000 children to pass through your office?

That's a tremendous army of patients—but it is the number of children under 14 whose lives you and your colleagues have saved since 1935 in just four diseases—tuberculosis, syphilis, influenza and pneumonia. And among working-age victims 2,000,000 are alive today who would not have survived if the 1935 death rate had remained constant.

In the past 25 years, new and potent drugs have played a significant role in reducing mortality from these diseases. Such an achievement results from the combined efforts of many organizations, professions and enterprises . . . including people working in medical and pharmaceutical research, production, and distribution, who make drug products available to doctors and dentists, hospitals and pharmacies, and to public and voluntary health agencies.

The prescription drug industry is proud of its role in this great work.

THIS MESSAGE IS BROUGHT TO YOU ON BEHALF OF THE PRODUCERS OF PRESCRIPTION DRUGS.
PHARMACEUTICAL MANUFACTURERS ASSOCIATION • 1411 K. STREET, N. W., WASHINGTON, D. C.


When minor aches and pains
disturb your patients' sleep...
BAYER® ASPIRIN
DOESN'T MAKE THEM SLEEP,
IT LETS THEM SLEEP,
NATURALLY!

**AND WITH BAYER ASPIRIN,
THERE'S NO
"SEDATIVE HANGOVER."**

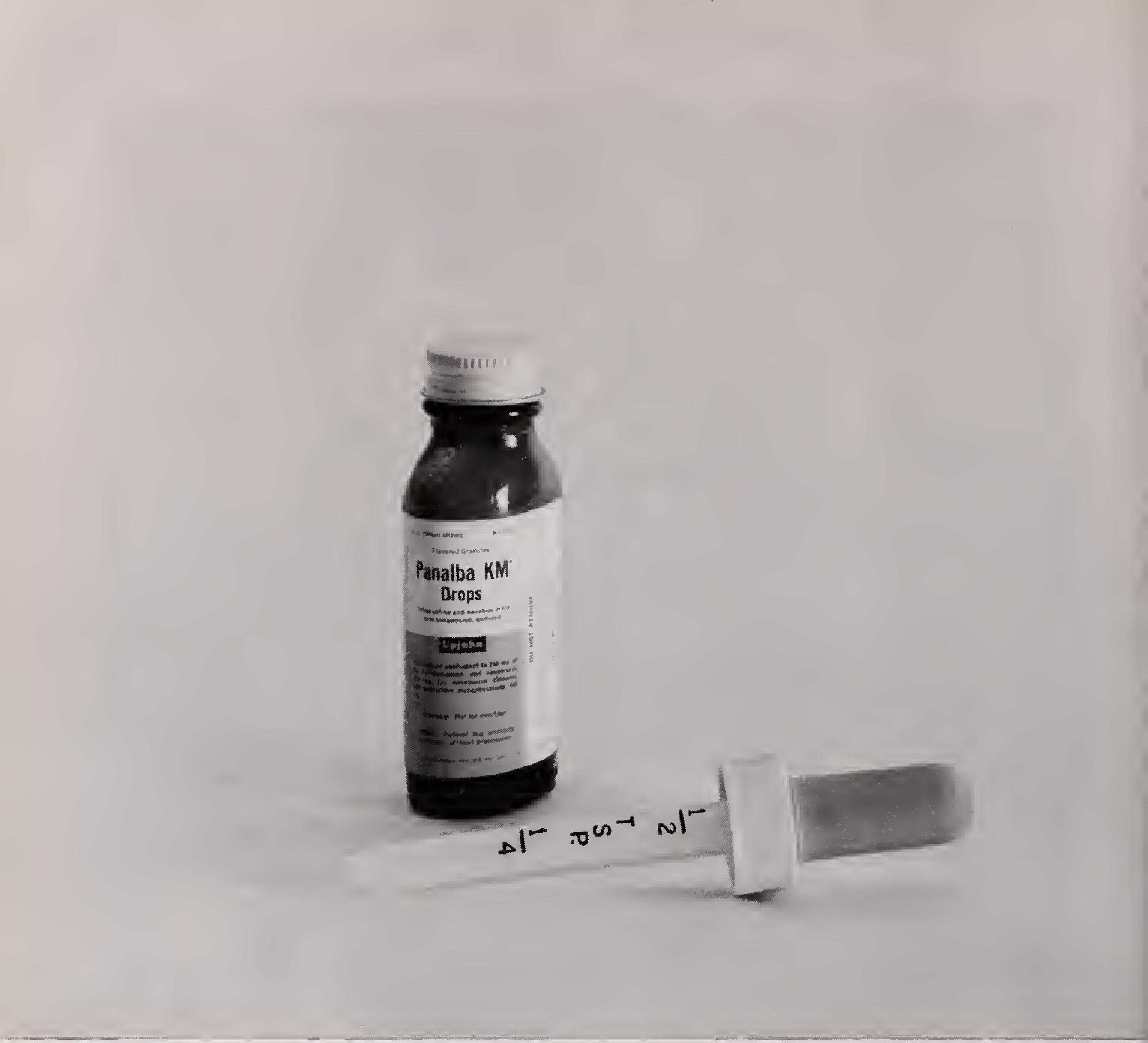
There are, of course, a great many instances of sleeplessness in which the patient should be directed to take a sedative to induce sleep.

But there are also many instances in which sleeplessness is caused by nothing more serious than minor aches and pains which can easily be relieved by one or two tablets of Bayer Aspirin. With physical discomforts gone, sleep comes naturally.

And when Bayer Aspirin is used as a sleeping aid, patients never suffer the "sedative hangover" which so often follows an induced sleep.

So remember, when minor aches and pains disturb your patients' sleep, Bayer Aspirin doesn't make them sleep; it lets them sleep, naturally, with no "sedative hangover."

BAYER
ASPIRIN
FAST PAIN RELIEF



Supplied: Flavored granules for suspension, in 30 cc. bottles with dropper-stopper calibrated in ¼ and ½ teaspoonful graduations. After mixing and shaking with 25 cc. water, each 5 cc. teaspoonful of suspension will contain:
Panmycin* (tetracycline)
  equivalent to tetracycline
  hydrochloride .... 125 mg.
Albamycin* (as novobiocin
  calcium) .... 62.5 mg.
Potassium
  metaphosphate ... 100 mg.

Usual pediatric dosage:
½ teaspoonful per 7½ to 10 pounds of body weight per day, administered in two to four equally divided doses.

(*Reminder advertisement.* Please see package insert for detailed product information.)

*TRADEMARK, REG. U.S. PAT. OFF.
COPYRIGHT 1962, THE UPJOHN COMPANY

THE UPJOHN COMPANY
KALAMAZOO, MICHIGAN

Upjohn

Liquid asset

Now that we have added a new liquid-dosage form to our Panalba* family, you may prefer to begin treatment with Panalba KM* Drops when dealing with bacterial infections of unknown etiology in infants and children. From the outset, pending laboratory determinations, your treatment is broadened in antibacterial coverage because of the simultaneous administration of two antibiotics that complement each other. They were carefully chosen for this purpose.

Panalba combines tetracycline (selected for its breadth of coverage) and novobiocin (selected for its unique effectiveness against staph). That is why, in most bacterial infections of unknown etiology, Panalba offers excellent chances for therapeutic success—and why it should be your antibiotic of *first* resort.

If you've been thinking
of adding your
own x-ray service...

get the
PRACTICAL PLAN
from your G-E man...

He gives you more than a "makeshift" layout!

Your G-E x-ray representative works with all kinds of installations. He can judge the type of equipment best suited to the demands of your practice and can help you plan its most efficient arrangement. His detailed layout will take full advantage of dozens of time-and-money-saving details — including suggestions on electric power and wiring requirements, x-ray protective needs, darkroom plumbing and accessories, plus many other recommendations to insure a completely efficient installation.

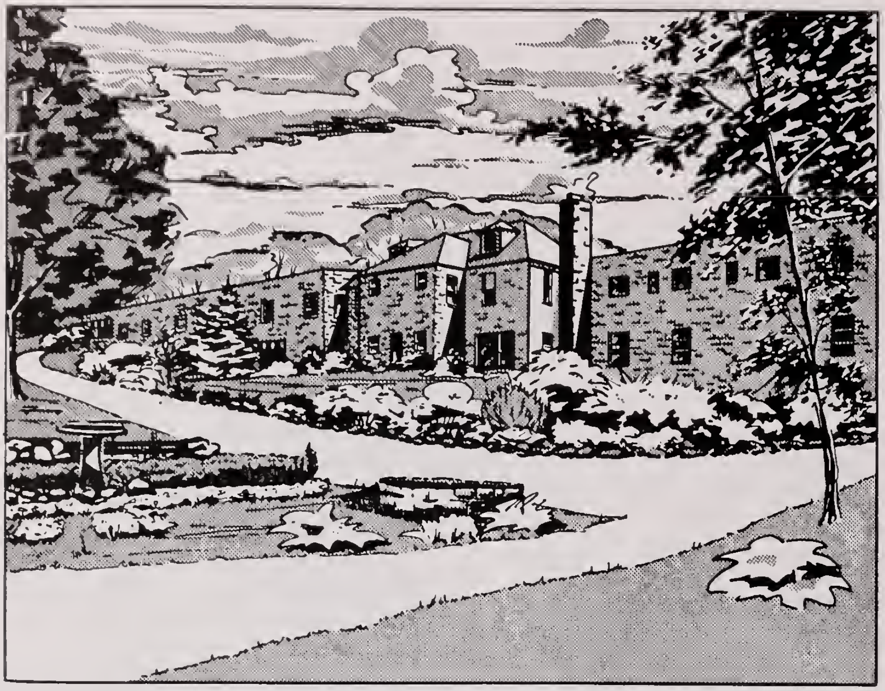
Your G-E man has earned a reputation among x-ray users as "*the* man who knows x-ray." What's more, he's backed by a full-time staff of specialists in the layout and design of x-ray installations. With this kind of help you can efficiently add x-ray to your practice. An obligation-free survey to start your practical plan can be had by phoning your G-E man at any office shown below.

MAXISERVICE® X-ray Rental opens the way to new x-ray equipment *without capital investment*. We will gladly show you how it provides equipment of your choice on a "pay-as-you-go" basis, for a modest monthly fee.

Progress Is Our Most Important Product

GENERAL ELECTRIC

CONTACT OUR DIRECT FACTORY BRANCH AT
SILVER SPRING, MARYLAND
8710 Georgia Ave., N.W. ○ Juniper 9-4355



"All the Comforts of Home" . . .

for

POST OPERATIVE
•
MEDICAL
•
CONVALESCENT
•
DIABETIC
•
PARALYTIC
•
INVALID
•
AGED
•
CHRONIC
•
AMBULATORY
•
RETIRED GUESTS, ETC.

★ A MEDICAL INSTITUTION UNDER THE SUPERVISION OF REGISTERED NURSES ★
LICENSED BY STATE AND COUNTY

KENSINGTON GARDENS SANITARIUM

AN ULTRA-MODERN HOME IN THE SUBURBS ON TEN ACRES
WITH A COUNTRY ATMOSPHERE

3000 McComas Avenue Kensington, Maryland

MEMBER OF

National Geriatrics Society
CARE OF THE AGED

American Nursing Home Association

MEMBER
AND MARYLAND NURSING HOME ASSOCIATION

- Rehabilitation Facilities
- Private and Semi-Private Rooms with Connecting Baths
- Beautifully Decorated
- Television in Spacious Lounges
- Large Porches
- Lovely Lawns and Shade Trees
- Supervised Diets
- Patients May Retain Their Own Physician
- 24-Hour Nursing Care
- Reasonable Rates
- Recreation and Physical Therapy

For Further Information Phone

LOckwood 5-2291 or LOckwood 5-0872

Proprietors-Administrators

LILLIAN H. and GEORGE L. BRICKER

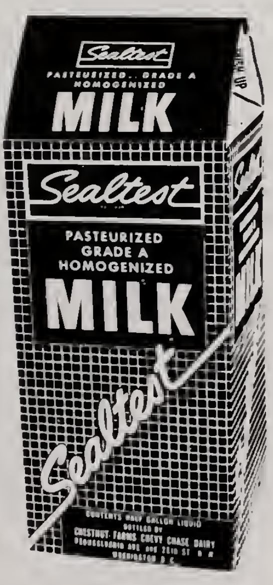
THE LAUREL SANITARIUM LAUREL, MARYLAND

Geriatric
Hospital
Buildings in centre
of 122 acres.
ESTABLISHED 1905

Accommodations
available for
senile ambulatory
women who need
psychiatric care.

LICENSED FOR TREATMENT OF NERVOUS AND MENTAL DISEASES
Phone Parkway 5-1250—Jesse C. Coggins, M.D.—Medical Director

GREATER WASHINGTON'S
MOST POPULAR VITAMIN
D HOMOGENIZED MILK


Sealtest
PASTEURIZED GRADE A HOMOGENIZED
MILK
Sealtest
PASTEURIZED
GRADE A
HOMOGENIZED
MILK
Sealtest

KALORAMA
CONVALESCENT
HOME, INC.

Licensed by the D. C. Department
of Licenses and Inspections

INSTITUTIONAL CARE
for the medical management of
the acute stages of alcoholism.

2001 KALORAMA ROAD
at 20th Street, N.W. Decatur 2-2681

1942 . . . NINETEENTH ANNIVERSARY . . . 1962

PROFESSIONAL BUSINESS MANAGEMENT, INC.

John C. Post, *President*

A Personal Service Designed to Assist the Doctor with the Business Side of Medical Practice.

• *Medical Management Specialists* •

1000 20th Street, N.W. Tel. FEderal 8-3200

CAPITAL NURSE REGISTRY

(Est. 1910)

Undergraduate
Practical

Nurses
Recommended
by Physicians

All Nurses Have Had Hospital Training

24 Hour Telephone Service

One of Washington's outstanding
Registries, serving physicians
and surgeons since 1910

LICENSED BY DISTRICT OF COLUMBIA

Your Patronage Solicited

Telephone

RAndolph 3-2600 or 3-1771

THE FINEST
COSTS NO MORE

For over a hundred years the people of Washington have depended on Joseph Gawler's Sons in time of bereavement. Over the generations, Gawler's has built and maintained a tradition of service . . . reverent, fitting and beautiful. It has been our constant effort . . . our duty, to maintain the standard in which the finest families have placed their implicit trust.

a century of service

JOSEPH
GAWLER'S
SONS, INC.

FUNERAL DIRECTORS
1756 Pennsylvania Avenue, N.W.
(Just west of the White House)
Telephone: NAtional 8-5512

NURSES REGISTRY

EXPERIENCED UNDERGRADUATES
& PRACTICAL NURSES

Recommended by Physicians
At Your Service for Day or Night Duty
In Washington and nearby area

CALL—RAndolph 6-6706
(A non-profit organization)

"We Make Business Possible"

MALLOREY
OFFICE SUPPLY
COMPANY

Commerical Stationers
Printing
Office Supplies ● Engraving Office Furniture

732 9th Street, N.W.
Washington 1, D. C.
Republic 7-0414

PHYSICIAN SUPPLIES
ANATOMICAL SUPPORTS
HOSPITAL EQUIPMENT

Instruments
Blood Chemistry Reagents
Disposable Products
Anatomical Supports—Stockings
Wheel Chairs—Hospital Beds
Office Equipment—Colostomy Supplies

Call ASSCO for Fast Delivery

ACCREDITED SURGICAL SALES
3226 Wisconsin Ave., N.W. EM 3-9595
Washington, D. C.

"Registered Nurses—For Private Duty"

U. S. EMPLOYMENT SERVICE
PROFESSIONAL OFFICE

GRADUATE NURSES REGISTRY
1000 16TH STREET, N.W.
WASHINGTON 6, D. C.

CALL—DISTRICT 7-1129

24-hour telephone service—
7 days a week

MAXWELL
AND
TENNYSON
PHARMACISTS

"Where Pharmacy is a Profession"

M&T

Washington, D. C.

1801 Eye Street	NAtional 8-0206
1835 Eye Street	REpublic 7-4600
1726 Eye Street	STerling 3-7077

Prescription called for and delivered without extra charge

Exclusive Distributor
Marcelle Cosmetics*
HYPO-ALLERGENIC
Chicago, Illinois

*Accepted for advertising in publications of the American Medical Association.

In the Chevy Chase Area
FOR THE BEST IN DRUGS AND SERVICE
IT'S

HIGGER'S

Complete Biological Stocks
Marcelle Hypo Allergenic Toiletries

HIGGER'S DRUGS, INC.
5015-17 Connecticut Avenue
Phone: Woodley 6-1815

Surgical Supplies and Equipment

Complete Fitting Service for
Ladies and Men

NELSON KLOMAN SURGICAL SUPPLY CO.
1018 - 18th Street, N.W
Washington 6, D. C.

Telephone: FEderal 8-5245

THE
BIRTCHER MEDICAL DISTRIBUTORS
OF D. C.

Complete lines of
Physical and Hydrotherapy Equipment
Electro-Surgical Equipment
Electrocardiograph–Cardioscope–
Defibrillator and Heart Pacer

Distributors for:

PROFEXRAY X-RAY EQUIPMENT

A complete line of Radiographic and Fluoroscopic Equipment from the small Portable to 900 ma–150 KVP and superficial therapy. Also, most makes of X-ray accessories.

New and used equipment always in stock.

3314 M Street, N.W., Washington 7, D. C.
FEderal 3-2660

T. J. STRATTON

MEDICAL EQUIPMENT REPAIR SERVICE
Official factory service station for
many manufactures.

BEUCHLER'S
915-19th Street, N.W. Republic 7-6006

THE GIBSON COMPANY

57 years serving the medical profession

Medical and Surgical Supplies
Hospital, Invalid and Sickroom Supplies
Physiotherapy Equipment
Surgical Fitting Specialists
Expert Medical Equipment Repair Service

1908 K Street, N.W. Federal 8-2688

THE MEDICAL ANNALS OF THE DISTRICT OF COLUMBIA is published by the Medical Society of the District of Columbia for the promulgation of information of scientific, general medical and personal interest.

Manuscripts for publication, news items, books for review, and correspondence relating to the editorial management should be sent to DR. WALLACE M. YATER, editor, MEDICAL ANNALS OF THE DISTRICT OF COLUMBIA, 1718 M Street, N.W., Washington 6, D. C.

Articles are accepted for publication on condition that they are contributed solely to this journal. Manuscripts must be typewritten, double spaced, and the original copy submitted. Photographs and drawings for illustrations must be carefully marked and show clearly what is intended. MEDICAL ANNALS will bear the cost of printing two cuts accompanying manuscripts submitted for publication. The cost of printing more than 2 cuts must be borne by the author.

Bibliographies should include the name of author (last name and initials), exact title of article, name of periodical, with volume, page, month (day of month in weekly), and year. References should be numbered consecutively in the order in which they appear in the text.

Matter appearing in the ANNALS is covered by copyright but, as a rule, no objection will be made to its reproduction in reputable medical journals, if proper credit is given. However, the reproduction for commercial purposes of articles appearing in the MEDICAL ANNALS OF THE DISTRICT OF COLUMBIA will not be permitted.

Reprints may be obtained at cost.

THE MEDICAL ANNALS OF THE DISTRICT OF COLUMBIA is published monthly. Subscription is included in the annual dues of members. To non-members the annual subscription price is: Domestic $4.50; Canadian $5.00; foreign $5.50, including postage; single copies, fifty cents.

Checks, etc., should be made payable to the Medical Society of the District of Columbia.

NATIONAL AND REGIONAL MEETINGS

August 13–16: National Medical Association. Hotel Sherman, Chicago. Address: Dr. John T. Givens, *Executive Secretary*, 1108 Church Street, Norfolk 10, Va.

September 1–4: College of American Pathologists. Palmer House, Chicago. Address: Dr. Arthur H. Dearing, *Executive Director*, Room 2115, Prudential Plaza, Chicago 1, Ill.

September 4–8: World Forum on Syphilis and Treponematoses. Sheraton-Park Hotel, Washington. Address: William Griggs, Communicable Disease Center, U. S. Public Health Service, Atlanta, Ga.

September 6–8: American Association of Obstetricians and Gynecologists. The Homestead, Hot Springs, Va. Address: Dr. Clyde L. Randall, *Secretary*, 100 Meadow Road, Buffalo 16, N. Y.

September 9–15: 12th International Congress of Dermatology. Shoreham and Sheraton-Park Hotels, Washington. Address: Dr. Naomi M. Kanof, Chairman, Local Committee on Arrangements, 1150 Connecticut Avenue, N.W., Washington 6, D. C.

September 14: Maryland Medical and Chirurgical Faculty. Ocean City, Md. Address: Mr. John Sargeant, *Executive Secretary*, 1211 Cathedral Street, Baltimore, Md.

October 12–13: American Medical Writers Association. Sheraton-Park Hotel, Washington. Address: Dr. Robert J. Benford, President, Mid-Atlantic Chapter, 1411 K Street, N.W., Washington 5, D. C.

October 15–17: Second Interstate Scientific Assembly. Sheraton-Park Hotel, Washington. Address: Mr. Theodore Wiprud, 1718 M Street, N.W., Washington 6, D. C.

October 25–27: Divisional Meeting, American Psychiatric Association. Shoreham Hotel, Washington. Address: Dr. Norman Taub, 3900 Garrison Street, N.W., Washington 16, D. C.

November 11–14: Association of Military Surgeons of the United States. Mayflower Hotel, Washington. Address: Colonel Robert E. Bitner, Secretary, 1726 Eye Street, N.W., Washington 6, D. C.

Eugene F. Roesser, C.L.U.

—Since 1949 dedicated to helping physicians and their families attain a better life through high quality, well planned insurance and investment programs.

1130 Seventeenth Street, N.W.
Washington 6, D.C.
Telephone District 7–1114

McDermott Insurance

Professional and Personal Insurance
Placement for the Doctor

1130 Seventeenth Street, N.W.
Washington 6, D.C.

Telephone District 7–1114

When treatment for

IMPOTENCE

is indicated

ANDROID™ tablets

ANDROGEN-THYROID-COMBINATION

in two convenient dosage forms

ANDROID

Each yellow tablet contains:
Methyl Testosterone ....2.5 mg.
Thyroid Ext. (1/6 gr.) ....10 mg.
Glutamic Acid ....50 mg.
Thiamine HCl ....10 mg.

ANDROID-H.P.
(High Potency)

Each orange tablet contains:
Methyl Testosterone ......5 mg.
Thyroid Ext. (1/2 gr.) ....30 mg.
Glutamic Acid ....50 mg.
Thiamine HCl ....10 mg.

INDICATIONS: **Impotence in male.**

AVERAGE DOSE: One tablet three times daily.

AVAILABLE: Bottles of 100 and 500 at your pharmacy.

CAUTION: Not to be used when testosterone is contra-indicated. Federal law prohibits dispensing without prescription.

1. *Methyltestosterone-Thyroid in Treating Impotence*, A. S. Titeff, *General Practice, Vol. 25, No. 2, February, 1962, pp. 6-8.*
2. *Thyroid-Androgen Relations*, L. Hellman, et al., *The Jrl. of Clin. Endocrinology and Metabolism, August 1959.*

Write for samples and literature...

BROWN **THE BROWN PHARMACEUTICAL COMPANY**
2500 West Sixth Street, Los Angeles 57, California

COOK PRECAPS-ONE

ESSENTIAL PRENATAL DAILY VITAMIN AND MINERAL REQUIREMENTS

Each light red Precap-One contains:

		% MDR for pregnancy*
VITAMIN A	6000 units	150%
VITAMIN D	400 units	100%
THIAMINE (B_1)	1.5 mg.	150%
RIBOFLAVIN (B_2)	2.5 mg.	200%
VITAMIN C (Ascorbic Acid)	100 mg.	333%
NIACINAMIDE	15 mg.	150%
PYRODOXINE HCl	3 mg.	**
CALCIUM PANTOTHENATE	5 mg.	**
VITAMIN B_{12}	2 mcg.	**
FERROUS FUMERATE	132 mg. (44 mg. Fe)	289% (Fe)
CALCIUM CARBONATE	625 mg. (260 mg. Ca)	17% (Ca)

*Percentage of MDR for pregnancy based on one tablet daily.
**Need in human nutrition not yet established.

DOSAGE: For pregnant or lactating women, one tablet daily or as directed by a physician.

Price to your patient $4.10 per bottle of 100.

E. K. Cook & Co., Inc. BETHESDA, MARYLAND

CLASSIFIED ADVERTISEMENTS

Advertisements under the following headings are charged at the rate of $5.00 for one insertion of 50 words or less; $4.00 each for three insertions; and $3.00 each for six insertions or more. All advertisements are payable in advance; the Editorial Board reserves the right to edit copy. Closing date for new copy, 20th of month preceding date of issue.

Classified advertisements of a professional nature are free to members.

PHYSICIANS WANTED

DERMATOLOGIST to join a group consisting of an internist, surgeon, OB-GYN, ophthalmologist, psychiatrist and dentist. Potential is enormous. Telephone 434-0222 or 946-0923.

HELP WANTED

LABORATORY TECHNICIAN, certified, for work in internist's office, beginning about August 1, 1962. For information telephone District 7-1665.

REAL ESTATE

FOR SALE: Bethesda Area, ideal location for doctor, corner lot across street from shopping center, school and bus stop. Will build to suit. Telephone Empire 5-7712.

FOR SALE: Silver Spring: Doctor's or Dentist's home and office. Convenient to Holy Cross Hospital. See our display ad on opposite page. Contact Mr. Langdon of Bemis, Braid & Langdon, Inc., Real Estate Brokers D. C. and Maryland. Telephone 949-0900 anytime.

FOR SALE OR RENT: Ideal house-office for doctor and family: centrally air-conditioned rambler with 4 bedrooms and full basement; front and back porches; beautiful, fenced yard and shrubs. Located on University Blvd. between Langley Park and Four Corners, Md. Telephone Juniper 8-8700.

FOR SALE: Cape Cod brick, 1½-story, in Temple Hills Village, S.E. Finished private apartment in attic, with private entrance. Large patio over garage, attached to house. Walk-in basement with beautifully finished reception room, ample office space. Circular driveway; large parking area in rear. Price, $35,000. Telephone Logan 7-0545.

FOR SALE: Large house, including physician's office and well established practice, with or without medical equipment. All air-conditioned. Located at intersection of 16th Street and Military Road, N.W. Price, $45,000. Address Box 2, 1718 M Street, N.W. (6)

OFFICE SPACE WANTED

ALLERGIST desires office space, Wednesdays only, 4 or more rooms, downtown. Address Box 100, 1718 M Street, N.W. (6)

OFFICE SPACE AVAILABLE

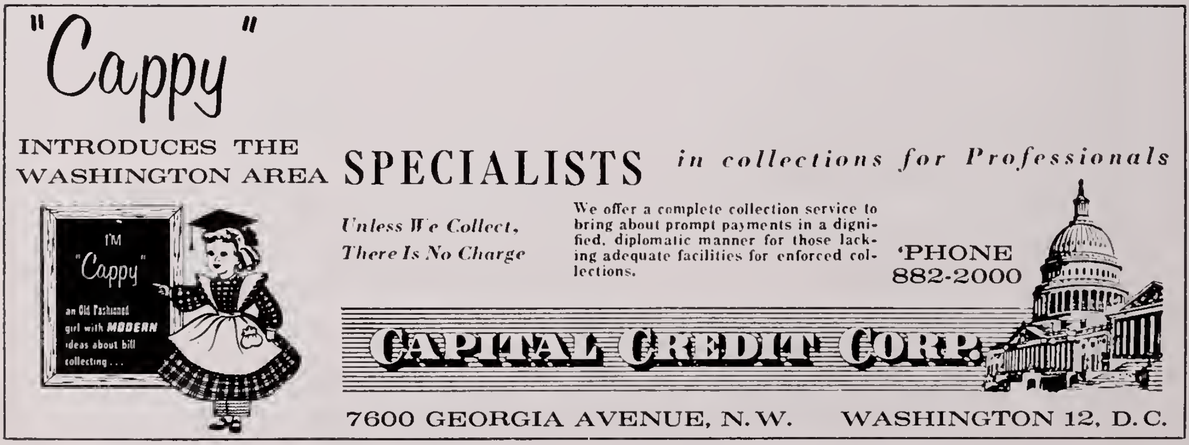
FOR RENT: Offices in Columbia Medical Building. Telephone Hobart 2-3032, evenings.

TO SHARE: Physician with Maryland license to share office with GP. Afternoons or evenings available. Telephone Hemlock 4-6498.

TO SHARE: Orthopedic surgeon will share with other orthopedic or general surgeon office suite in new building at 1616 18th Street, N.W. Offices newly furnished and fully equipped with X-ray, physiotherapy, plaster-room. Air-conditioned; separate consultation room; answering service. Very moderate expense. Telephone 232-0800.

TO SHARE: Furnished offices available part-time in Bethesda Medical Building. Telephone Oliver 2-1177.

TO SHARE: Office space in Southeast Washington, over D.C. line, with OB-GYN and surgeon. Any type of medical or other professional practice welcome. Telephone Redwood 6-6636 or 449-8069.


"Cappy"
INTRODUCES THE WASHINGTON AREA SPECIALISTS *in collections for Professionals*

I'M "Cappy" an Old Fashioned girl with MODERN ideas about bill collecting . . .

Unless We Collect, There Is No Charge

We offer a complete collection service to bring about prompt payments in a dignified, diplomatic manner for those lacking adequate facilities for enforced collections.

PHONE 882-2000

CAPITAL CREDIT CORP.

7600 GEORGIA AVENUE, N.W. WASHINGTON 12, D.C.

Classified Advertisements (*Continued*)

FOR RENT OR LEASE: Plans now being completed for remodeling doctors' offices for occupancy around August 1. Location, near 18th and N Streets, N.W. Public transportation. Limited parking available. Address Box 55, 1718 M Street, N.W. (6)

FOR RENT: Physician's offices: 4 rooms and lavatory. Equipped for GP if desired. Located near Massachusetts and Wisconsin Avenue, N.W., corner first floor. Rent reasonable. Telephone Federal 8-0127.

FOR RENT: Office suite at 1625 Massachusetts Avenue, N.W.: reception room, 2 private offices, 2 treatment rooms, approximately 950 sq. ft.; air-conditioned. One parking space. Reasonable rental. Telephone Hobart 2-4700 or Randolph 6-1644.

FOR RENT: New Medical Building, 1726 Eye Street, N.W.: one large suite, 1400 sq. ft., or may be subdivided. All utilities furnished including switchboard service. Central air-conditioning. Telephone Manager, National 8-2636.

FOR RENT: Parkwood Medical Building, 1746 K Street, N.W.: two-room suite, private entrance, large rooms. Available now. Telephone 296-4100, ext. 42.

TO SHARE: Offices in Silver Spring in new medical building on Spring Street. Fully furnished and equipped. Full-time nurse. Telephone 588-4820.

FOR RENT: Langley Park, Md., adjacent to busy shopping centers, 2 adjoining suites, about 1,000 sq. ft. each. Five doctors in building. Ideally located for ophthalmologist, EENT, orthodontist, internist, lawyer, accountant, etc. Reasonable. Some equipment available, e.g., examining table, etc. Telephone Woodley 6-6464.

EQUIPMENT FOR SALE

FIVE-PIECE SUITE, Hamilton Steeltone, coral and grey, $590; walnut PHYSIOTHERAPY TREATMENT TABLE, $45. Purchased 1957–58, used until 1960. Telephone Wheaton, Maryland 942-1456.

DOCTORS' ELECTRIC SIGNS (2) with fluorescent lights: 1 single-faced to be put in window or attached to wall; other double-faced and attached to attractive black pole. In excellent condition. Purchaser has only to change stencil. Telephone Juniper 8-8700.

MISCELLANEOUS

A GROUP OF PHYSICIANS who have overcome their alcohol problem will share their knowledge with their colleagues. All communications confidential. Address Box 50, 1718 M Street, N.W. (6) or telephone 526-6087 between 6 and 7 p.m.

AMEF

A Symbol
to Support . . .

American Medical
Education Foundation

535 N. Dearborn St., Chicago 10, Ill.

MEDICAL OFFICER (PSYCHIATRY)—Federal Government, Washington, D. C. $15,030. U. S. citizen. Duties involve initiating, developing, implementing and maintaining long-range government-wide policies and programs toward the solution of social-medical problems involved in the employment of the mentally restored and utilization of Federal employees with emotional problems. Send resume to Director of Personnel, Civil Service Commission, Washington, D. C. Extensive suitability and qualifications investigation required. Must meet Civil Service Commission requirements.

PHYSICIANS—PART-TIME—Specialists in nonsurgical specialties, and/or basic science to provide authoritative medical evaluation of research data on new drugs. Regular scheduled tour of duty of 20 hours per week. Annual salary to $6700.00. Liberal fringe benefits of Civil Service. Membership in professional organizations encouraged. Send curriculum vitae to Irwin Siegel, M.D., Deputy Medical Director, Food and Drug Administration, Washington 25, D.C., Worth 3-7852.

DOCTORS—DENTISTS

HOME/OFFICE OPPORTUNITY
SILVER SPRING

Convenient to transportation, good highways and walking distance to new Hospital.

Deluxe rambler: 3 bedrooms, 2 baths, central air-conditioning, foyer entrance, etc., etc. and separate servants' quarters, bath and huge recreation room below.

House layout readily adaptable to private office practice in home.

Below $40,000.
Long-term lease or
deferred purchase terms.

Contact Mr. Langdon
BEMIS, BRAID & LANGDON INC.,
Real Estate Brokers D.C. & Md.
CALL 949-0900 Anytime.

Insurance For The Doctor

Russell, Marsh & Kennedy, Inc.
(formerly Hufty, Eubank & Russell, Inc.)

WILLIAM G. RUSSELL
President

1832 M St., N.W.
FEDERAL 8-7600

PROFESSIONAL LIABILITY*
EMPLOYEES' WORKMEN'S COMPENSATION
EQUIPMENT FLOATER
FIRE INSURANCE CONTENTS
BUSINESS EXPENSE DISABILITY
BONDS ON EMPLOYEES
AUTOMOBILE INSURANCE
OFFICE PUBLIC LIABILITY

ANNUITIES—FIXED & VARIABLE
NON-CAN DISABILITY INCOME
LOW COST TERM LIFE INSURANCE
PENSION PLANS FOR DOCTORS
PENSION PLANS FOR EMPLOYEES

**Endorsed by* MEDICAL SOCIETY OF D. C.

Today's Health
American Medical Association

A GOOD BUY IN PUBLIC RELATIONS

Today's Health is published for the American Family by the American Medical Association

GIVE GIFT SUBSCRIPTIONS
to your patients and friends

Today's Health - AMA
535 N. Dearborn Street
Chicago 10, Illinois

Please enter the following subscription:

☐ 2 YEARS $5.00 ☐ 1 YEAR $3.00
(U.S., U.S. POSSESSIONS & CANADA)

Name ____________________

Address ____________________

City ____________ Zone ______ State ______

Please Print--Use separate sheet for additional names. SJ

New and Enlarged Facilities make it possible to accept additional subscribers for TELEPHONE SECRETARIAL SERVICE *to the Medical Society's*

MEDICAL BUREAU

24-hour Telephone Service

For further information call
REPUBLIC 7-6100

INDEX OF ADVERTISERS

Page

Bank
- Riggs National Bank 4

Business Counseling
- Professional Business Management 45

Collection Agencies
- Capital Credit Corporation 50
- Credit Bureau, Inc. 5

Diagnostic Equipment
- Cambridge Instrument Company, Inc. 14

Dietetic Products
- Duffy-Mott Company 9
- General Mills, Inc. 30
- Sealtest Foods 45

Funeral Homes
- Joseph Gawler's Sons, Inc. 46
- S. H. Hines & Company 28

Insurance
- McDermott Insurance 48
- Mutual of Omaha 3-C
- Eugene Roesser 48
- Russell, Marsh & Kennedy, Inc. 52
- St. Paul Fire & Marine Insurance Company 17

Nurse Registries
- Association of Undergraduate and Practical Nurse Registry 46
- Capital Nurse Registry 46
- U. S. Employment Service for D. C. 46

Office Furniture and Supplies
- W. D. Campbell Company 6
- Mallorey Office Supply Company 46

Pharmaceuticals
- Ames Company 16
- Bristol Laboratories 20–21
- The Brown Pharmaceutical Company 49
- Burroughs Wellcome and Company 19, 34
- Ciba Pharmaceutical Products 10
- E. K. Cook & Company, Inc. 49
- Endo Laboratories 11

Page
- Glenbrook Laboratories 41
- Charles C. Haskell & Company 22
- Lederle Laboratories 8, 54
- Eli Lilly & Company 26
- Organon, Inc. 32
- Parke, Davis & Company 2-C, 3
- A. H. Robins Company 15, 37–38, 39
- Roche Laboratories 4-C
- Schering Corporation 25
- G. D. Searle & Company 27
- Smith, Kline & French Laboratories 35
- Upjohn Company 12–13, 42
- Wallace Laboratories 18, 29
- Winthrop Laboratories 7, 24, 31

Pharmacies
- Higger's Drugs 47
- Maxwell & Tennyson 47
- Peoples Drug Stores 36

Physicians Wanted
- Food and Drug Administration, HEW 51
- U. S. Civil Service Commission 51

Real Estate
- Bemis, Braid & Langdon, Inc. 51

Sanitariums
- Kalorama Convalescent Home 45
- Kensington Gardens Sanitarium 44
- Laurel Sanatarium 45

Surgical Supplies
- Accredited Surgical Sales 46
- Beuchler's, Inc. 47
- Birtcher Medical Distributors of D. C. 47
- Gibson Company 47
- Nelson Kloman Surgical Supply Company 47

X-ray and Radium Equipment
- General Electric Company 43

in arthritis: vitamins are therapy

In dealing with the chronic stress of arthritis the physician often faces the problem of nutritional imbalance. High potency B and C supplementation is needed for rapid replenishment of tissue stores of these water-soluble vitamins. STRESSCAPS meet this need and help support the natural metabolic defenses in the disease. Supplied in decorative "reminder" jars of 30 and 100.

Each capsule contains:	
Vitamin B_1 (Thiamine Mononitrate)	10 mg.
Vitamin B_2 (Riboflavin)	10 mg.
Niacinamide	100 mg.
Vitamin C (Ascorbic Acid)	300 mg.
Vitamin B_6 (Pyridoxine HCl)	2 mg.
Vitamin B_{12} Crystalline	4 mcgm.
Calcium Pantothenate	20 mg.

Recommended intake: Adults, 1 capsule daily, or as directed by physician, for the treatment of vitamin deficiencies.

LEDERLE LABORATORIES, A Division of AMERICAN CYANAMID COMPANY, Pearl River, N. Y.

STRESSCAPS®

Stress Formula Vitamins Lederle

IMPORTANT ANNOUNCEMENT

NOW -- A NEW PLAN OF INCOME PROTECTION INSURANCE DESIGNED TO SUPPLEMENT YOUR OFFICIAL D.C. MEDICAL SOCIETY PLAN.

OUTSTANDING FEATURES:

✓ LIFETIME BENEFITS FOR ACCIDENTS.

✓ UP TO AGE 65 FOR SICKNESS.

✓ SICKNESS BENEFITS DOUBLE AFTER 5 YEARS OF DISABILITY UP TO AGE 65.

Available only to members now carrying the Basic Plan, Policy Form LMN.

For additional details write or call:

Joseph E. Jones
102 Ring Building
1200 - 18th St. N. W.
Washington 6, D.C.

FEderal 8-3000

Mutual of Omaha

MUTUAL BENEFIT HEALTH
& ACCIDENT ASSOCIATION,
OMAHA, NEBRASKA

“Fear is sharpsighted...”

and has excellent ears as well. Witness the apprehensive cardiac who can hear his own heartbeat in the noisiest surroundings—the primigravida who experiences birth pangs six months ahead—the surgical patient who sees doom in the frown of a nurse.

It is in highly tense and anxious patients such as these that the “Librium Effect” shows up most distinctly. What is the Librium Effect? It's difficult to describe, but a patient treated with Librium feels different, even after a few doses. He appears different to his family and to his physician. Different not only in the sense of a change from the previous state of anxiety and tension, but also from the effect created by daytime sedatives or tranquilizers. Of very practical importance, too, is the fact that Librium does not depress the anxious patient and hence may be used safely even in the presence of depression. If you have patients whose “fear-sharpened” senses are making them—and those about them—miserable, why not investigate the “Librium Effect” for yourself? Consult literature and dosage information,available on request, before prescribing.

FOR RELIEF OF ANXIETY AND TENSION

LIBRIUM

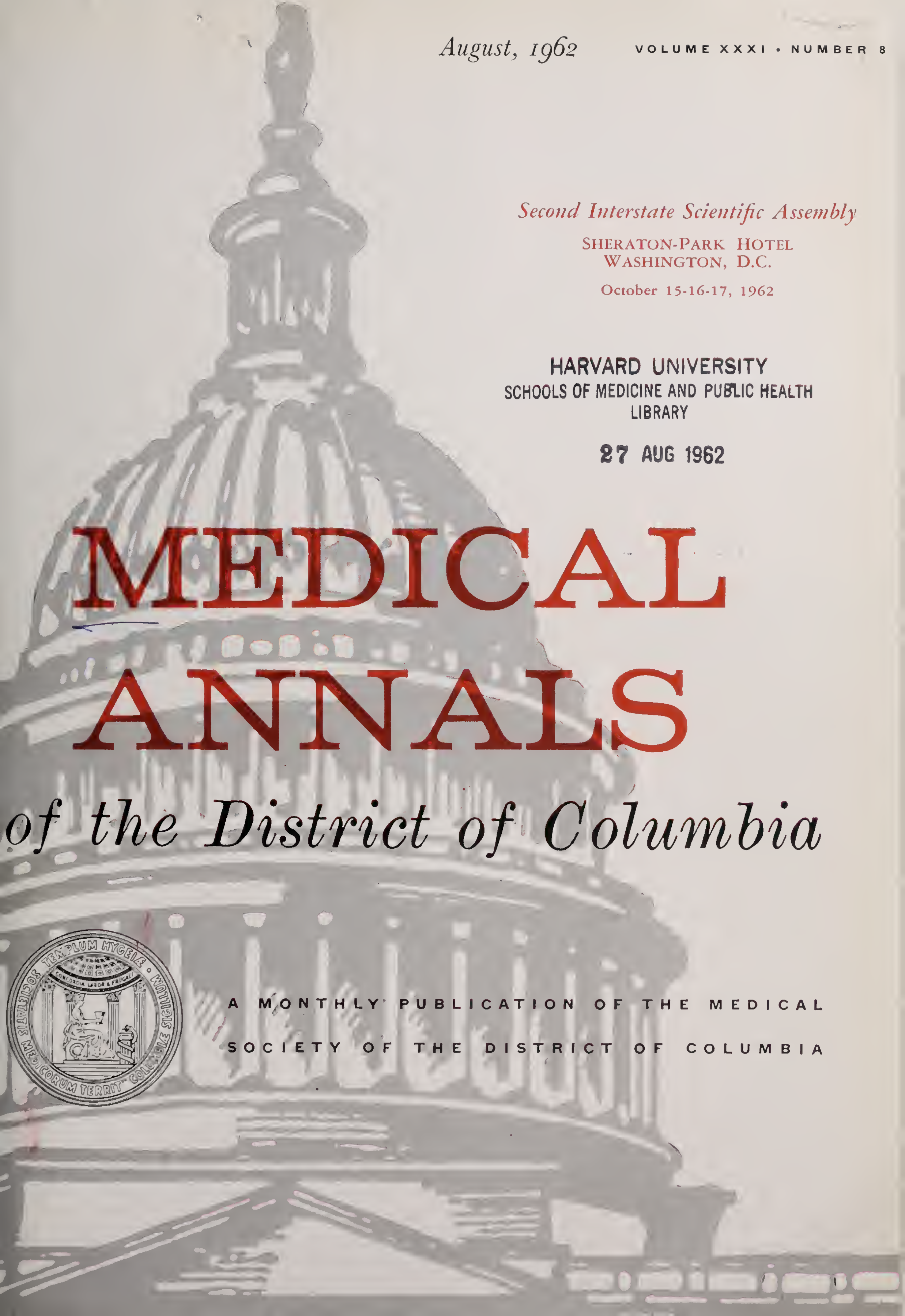
THE SUCCESSOR TO THE TRANQUILIZERS

LIBRIUM® Hydrochloride—7-chloro-2-methylamino-5-phenyl-3H-1,4-benzodiazepine 4-oxide hydrochloride

ROCHE

ROCHE

August, 1962 VOLUME XXXI • NUMBER 8



Second Interstate Scientific Assembly

SHERATON-PARK HOTEL
WASHINGTON, D.C.
October 15-16-17, 1962

HARVARD UNIVERSITY
SCHOOLS OF MEDICINE AND PUBLIC HEALTH
LIBRARY
27 AUG 1962

MEDICAL ANNALS

of the District of Columbia

A MONTHLY PUBLICATION OF THE MEDICAL SOCIETY OF THE DISTRICT OF COLUMBIA

R IS FOR RAGWEED... MOST TROUBLESOME ALLERGEN

LE, *Illust.*
rotation;
ls, an

by more or less continuous syncopation in the melody
b *Colloq.* A type of music (**ragtime music**) char-
acterized by a strongly syncopated melody superim-
posed upon a regularly accented accompaniment.
rag′weed′ (-wēd′), *n.* **a** *Eng.* The ragwort. **b** *U. S.*
Any of several coarse herbs (genus *Ambrosia*) typi-
fying a family (Ambrosiaceae, the ragweed family)
having heads of flowers subtended by an involucre
of bracts; esp. a very common weed (*A. elatior*)
with deeply lobed or dissected leaves; and the **great,**
or giant, ragweed (*A. trifida*), with trilobate leaves.
The cocklebursd (see COCKLEBUR) also belong to this
family.
rag′wort, (-wûrt′), *n.* Any of several plants (genus
Senecio) of the aster family, as the **golden ragwort**
(*S. aureus*) of the United States, having an open
corymb of yellow-rayed flowers.
ra′yah (rä′yȧ), *n.* [F., fr. Turk. *ra′aya*, fr. Ar.
ra′aya, coll. sing. *ra′iyah*, flock, herd.] A non-Mos-
lem subject of Ottoman Empire.
raid (rād), *n.* road. See ROAD raid, way.]
1. A hostile ursion; a foray; orig.,
an inroad men; hence, a
sudden or ace of any

WHEN DISCOMFORTS MOUNT WITH THE POLLEN COUNT

BENADRYL®

antihistaminic-antispasmodic

RELIEVES SYMPTOMS OF HAY FEVER

BENADRYL provides effective dual action to help control the allergic attack.

Antihistaminic action: A potent antihistaminic, BENADRYL breaks the cycle of allergic response, bringing relief of nasal congestion, sneezing, lacrimation, and pruritus.

Antispasmodic action: Because of its inherent atropine-like properties, BENADRYL affords relief of bronchial spasm.

BENADRYL Hydrochloride (diphenhydramine hydrochloride, Parke-Davis) is available in a variety of forms including: Kapseals,® 50 mg.; Capsules, 25 mg.; Emplets® (enteric-coated tablets), 50 mg.; in aqueous solutions: 1-cc. Ampoules, 50 mg. per cc.; 10- and 30-cc. Steri-Vials,® 10 mg. per cc.; Elixir, 10 mg. per 4 cc.; Cream, 2%; and Kapseals of 50 mg. BENADRYL Hydrochloride with 25 mg. ephedrine sulfate.

This advertisement is not intended to provide complete information for use. Please refer to the package enclosure, medical brochure, or write for detailed information on indications, dosage, and precautions. 93162

PARKE-DAVIS

PARKE, DAVIS & COMPANY, Detroit 32, Michigan

The

RIGGS

NATIONAL BANK

of WASHINGTON, D. C.

FOUNDED 1836

LARGEST BANK IN THE NATION'S CAPITAL

COMPLETE BANKING AND TRUST SERVICE

RESOURCES OVER $500,000,000

RIGGS NATIONAL BANK
SUCCESSOR TO RIGGS & CO.

MAIN OFFICE
1503 PENNSYLVANIA AVENUE, N.W.
(Opposite U. S. Treasury)

BRANCHES

FARMERS & MECHANICS
Wisconsin Ave. and M St., N.W.

DUPONT CIRCLE
1913 Massachusetts Ave., N.W.

PARK ROAD
14th St. and Park Rd., N.W

SEVENTH & EYE STREET
7th and Eye St., N.W.

NORTHEAST BRANCH
1348 4th St., N.E.

SEVENTH & D STREET
318 7th Street, N.W.

NORTHWEST
1779 Columbia Rd., N.W.

FRIENDSHIP
Wisconsin Ave. and Warren St., N.W.

CHEVY CHASE
Conn. Ave. and Morrison St., N.W.

LINCOLN BRANCH
17th and H Sts., N.W.

WASHINGTON LOAN
AND TRUST BRANCH
F St. at 9th, N.W.

17th & G STREET
BRANCH
14th and G Sts., N.W.

•

FACILITY
WALTER REED ARMY MEDICAL CENTER

TRUST DEPARTMENT OFFICE
1508 H Street, Northwest

Member Federal Deposit Insurance Corporation • Member Federal Reserve System

MEDICAL ANNALS

of the District of Columbia

EDITORIAL OFFICE:
1718 M Street, N.W., Washington 6
Telephone DIstrict 7-3111

Copyright, 1962,
by The Medical Society
of the District of Columbia.

Yearly Subscription, $4.50
Single Number, 50¢

Second-class postage paid at Baltimore, Md.
Published monthly at
Mount Royal and Guilford Avenues,
Baltimore 2, Maryland

Contents for August

SCIENTIFIC ARTICLES

Emotional Aspects of Youth Fitness. *James Patrick Scanlon, M.D.*, Washington 437

The Split-felt Plaster Collar for Ambulatory Patients. *Eugene G. Lipow, M.D., and O. Hugh Fulcher, M.D., F.A.C.S.*, Washington 444

Hepatic Function of Diabetic Patients on Chlorpropamide. *Adolph Friedman, M.D.*, Washington 447

Coexistent Unilateral Krukenberg Tumor and Pseudomucinous Cystadenocarcinoma of the Ovary. *V. A. Janovski, M.D.*, New York City 452

Maternal Mortality: District of Columbia, 1950–1959. *C. K. Fraser, M.D., F.A.C.S.*, Washington 456

The Psychiatric Department of D. C. General Hospital. A Survey of Patient Characteristics, Treatment and Disposition. *Allen Raskin, Ph.D., and Paul D. Sullivan, M.D.*, Washington 470

EDITORIALS

To All Members 477

Hospital Admission Fees 477

Financing the Health Care of the Aged 478

Child Development Clinic and Assessment Service 479

Student Opinion 480

(*Continued on page 6*)

The Physicians and Dentists Ajustment Service

A DIVISION OF

THE CREDIT BUREAU, INC.
WASHINGTON, D. C.

IN COÖPERATION WITH

ASSOCIATED CREDIT BUREAUS OF AMERICA, INC.

Will Sponsor a

Medical Accounts Management Program
on August 22 and 23, 1962, 7 p.m. to 10 p.m.
Chantilly Room, Hamilton Hotel, 14th & K Streets, N.W.

You will receive additional information shortly. This is the only training program of its kind which gives the complete Medical Credit and Collection story. If you wish additional information, call Mr. Kane at NAtional 8-0680.

Contents for August

(*Continued*)

SPECIAL ARTICLE

Lest We Forget. A Medical Report on the Mauthausen Concentration Camp. *Charles E. Goshen, M.D.*, Morgantown, West Va. 485

MISCELLANY

President's Page: Democracy at Work 476
Directions for the Man Who Thinks a Peptic Ulcer Is a Status Symbol. *William T. Gibb, M.D.*, Washington 481
Cancer Page: Rectal Cancer 482
Annual Report on Administrative Services of Medical Service. *George B. McGovern*, Washington 483
Dr. Hussey Reëlected Chairman of the AMA Board 492
News and Personals 493
Membership 496
Medical Annals Staff and Officers of Medical Society *Adv.* 20
National and Regional Meetings *Adv.* 44
Book Reviews *Adv.* 47
Index of Advertisers *Adv.* 51

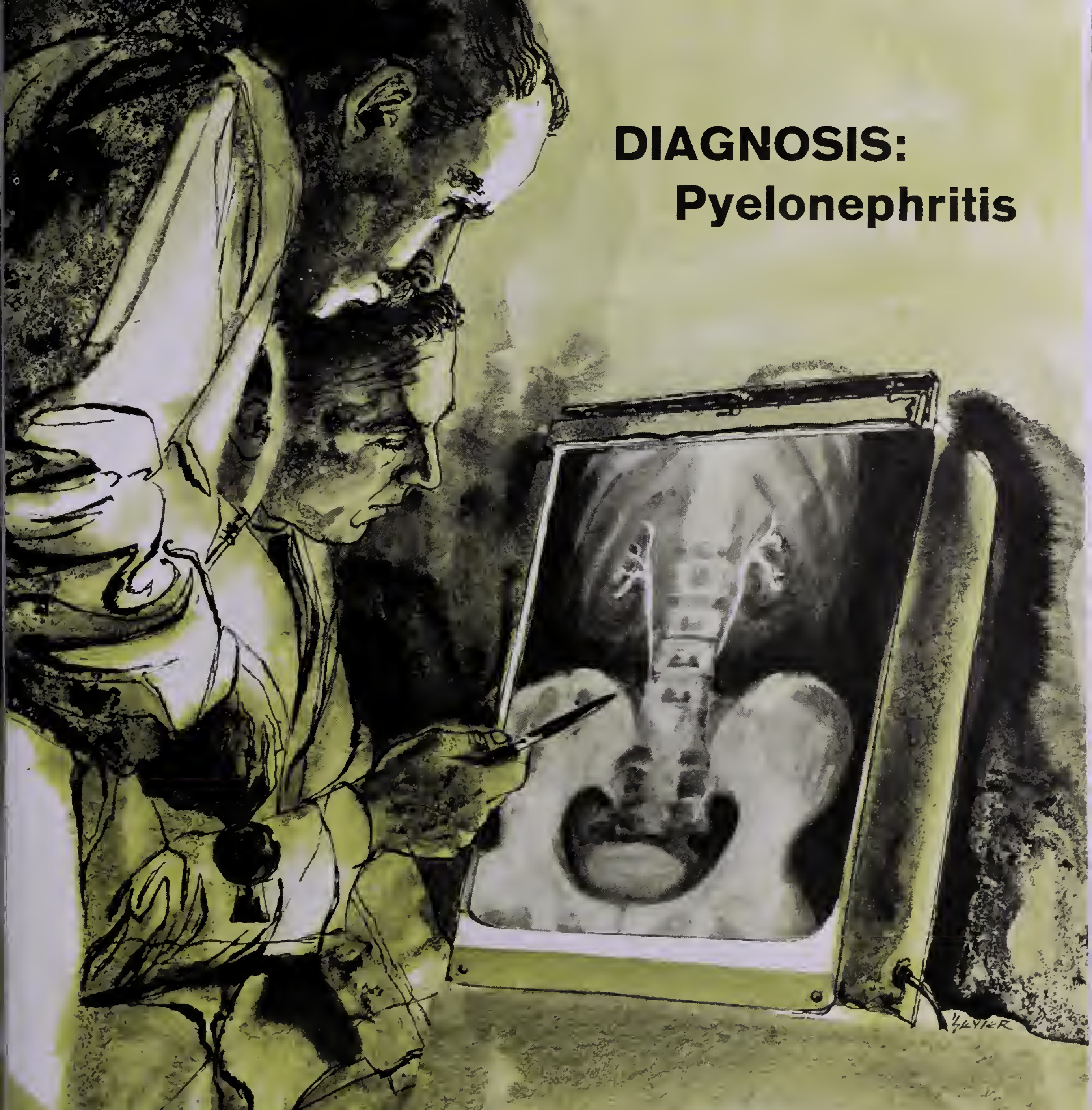
Specialists in Office PLANNING

The W. D. Campbell Company knows the fine points of business furniture and furnishings. It will pay you to call on our experienced planning and decorating service. No obligation on your part.

Put your problems in the creative hands of our experts.

Phone MEtro. 8-5660

The W. D. Campbell Company
WASHINGTON'S LEADING OFFICE FURNITURE SUPPLIERS, SINCE 1917
1014 Fifteenth Street, N.W. Washington 5, D. C.
Free parking in the building



DIAGNOSIS:
Pyelonephritis

HERAPEUTIC NEED: Rapid suppression of causative or-
nisms and attention to fluid requirements.

NTIBIOTIC: DECLOMYCIN®
Demethylchlortetracycline Lederle

ecause it is highly effective against the common patho-
ens in G. U. infections.

st complete information on indications, dosage, precautions and contraindications from your Lederle representative, or write to Medical Advisory Department.

ERLE LABORATORIES, A Division of AMERICAN CYANAMID COMPANY, Pearl River, New York Lederle

additional clinical evidence[1]
Sardo®
in the bath
"soothed the skin
diminished itch
decreased
inflammation"
in dry, pruritic
skin disorders
SENILE DERMATOSES
ATOPIC DERMATITIS
PSORIASIS
STASIS DERMATITIS
CONTACT DERMATITIS
LOCALIZED
NEURODERMATITIS
Sardo
Sardo

BENEFICIAL RESULTS were obtained with **SARDO** in the bath in 122 of 135 patients (90%) with dry, itchy skin conditions, in most cases with beneficial effect "after the first bath." Dryness was allayed in all cases, and associated itching "either completely relieved or greatly improved." No irritation or sensitization was observed.

This new study corroborated others[2-4] showing that SARDO helps re-establish the normal physiologic lipid-aqueous skin balance.

Pleasant, easy-to-use SARDO releases millions of microfine water-dispersible globules* in the bath. Bottles of 4, 8 and 16 oz.

©1962 *Patent Pending T.M.

SAMPLES and literature available from...

SARDEAU, INC.

75 East 55th Street, New York 22, N. Y.

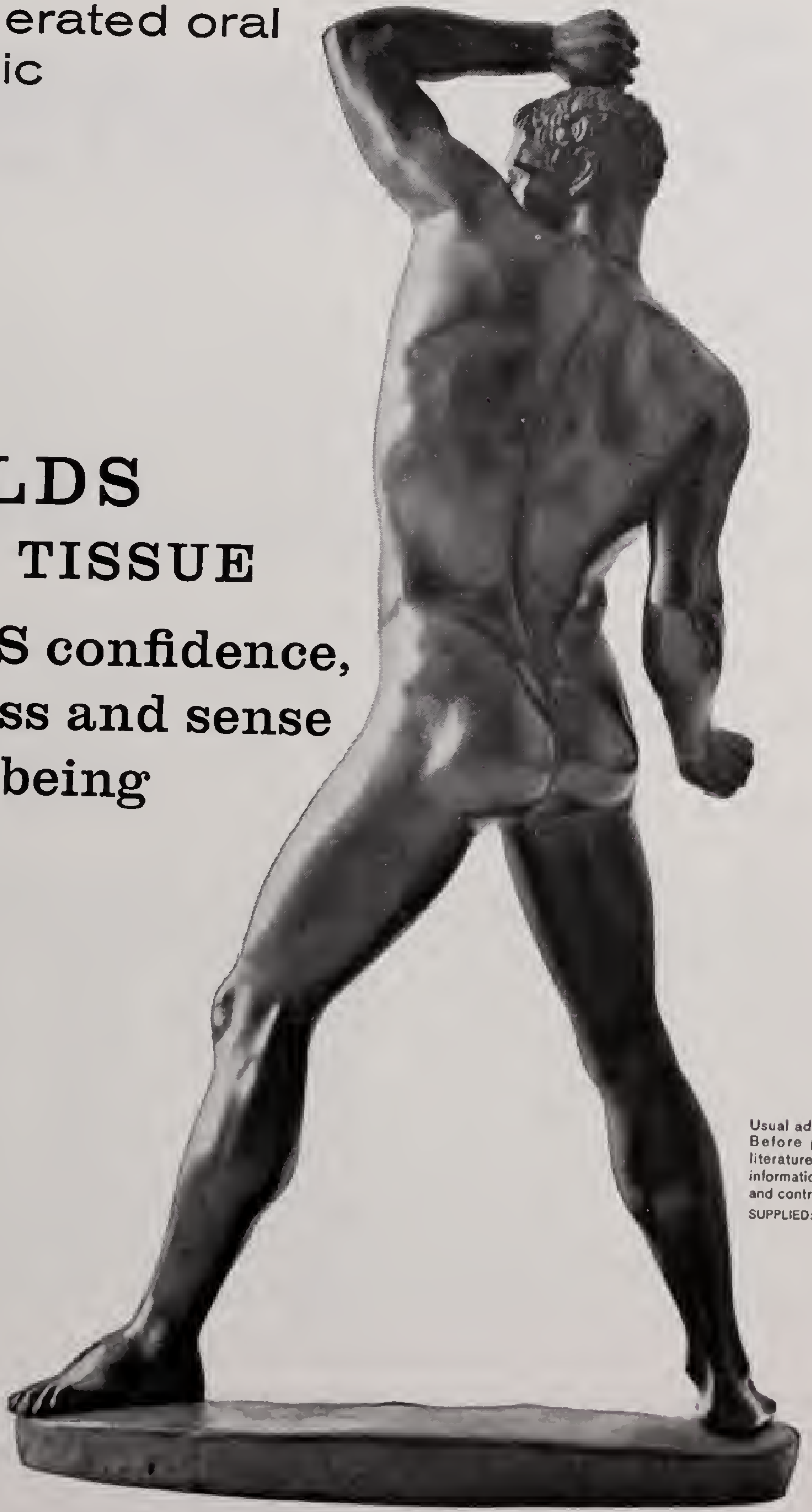
1. Borota, A., and Grinell, R.N.: J. Amer. Geriatrics Soc., 10:413, 1962.
2. Spoor, H. J.: N.Y. State J.M. 58:3292, 1958.
3. Lubowe, I. I.: Western Med. 1:45, 1960.
4. Weissberg, G.: Clin. Med. 7:1161, 1960.

THE SIGNIFICANT NEW PHYSIOTONIC

WINSTROL®

BRAND OF STANOZOLOL

well tolerated oral anabolic



BUILDS

BODY TISSUE

BUILDS confidence, alertness and sense of well-being

Usual adult dose: 1 tablet t.i.d. Before prescribing, consult literature for additional dosage information, possible side effects and contraindications.

SUPPLIED: 2 mg. tablets. Bottles of 100.

Winthrop
LABORATORIES
New York 18, N. Y.

ith WINSTROL, patients look better... feel stronger—because they are stronger

blood pressure approaches normal more readily, more safely....simply with Salutensin®

(hydroflumethiazide, reserpine, protoveratrine A–antihypertensive formulation)

Early, efficient reduction of blood pressure. Only Salutensin combines the advantages of protoveratrine A ("the most physiologic, hemodynamic reversal of hypertension"[1]) with the basic benefits of thiazide-rauwolfia therapy. The potentiating/additive effects of these agents[2-8] provide increased antihypertensive control at dosage levels which reduce the incidence and severity of unwanted effects.

Salutensin combines Saluron® (hydroflumethiazide), a more effective 'dry weight' diuretic which produces up to 60% greater excretion of sodium than does chlorothiazide[9]; reserpine, to block excessive pressor responses and relieve anxiety; and protoveratrine A, which relieves arteriolar constriction and reduces peripheral resistance through its action on the blood pressure reflex receptors in the carotid sinus.

Added advantages for long-term or difficult patients. Salutensin will reduce blood pressure (both systolic and diastolic) to normal or near-normal levels, and maintain it there, in the great majority of cases. Patients on thiazide/rauwolfia therapy often experience further improvement when transferred to Salutensin. Further, therapy with Salutensin is both economical and convenient.

Each Salutensin tablet contains: 50 mg. Saluron® (hydroflumethiazide), 0.125 mg. reserpine, and 0.2 mg. protoveratrine A. See Official Package Circular for complete information on dosage, side effects and precautions.

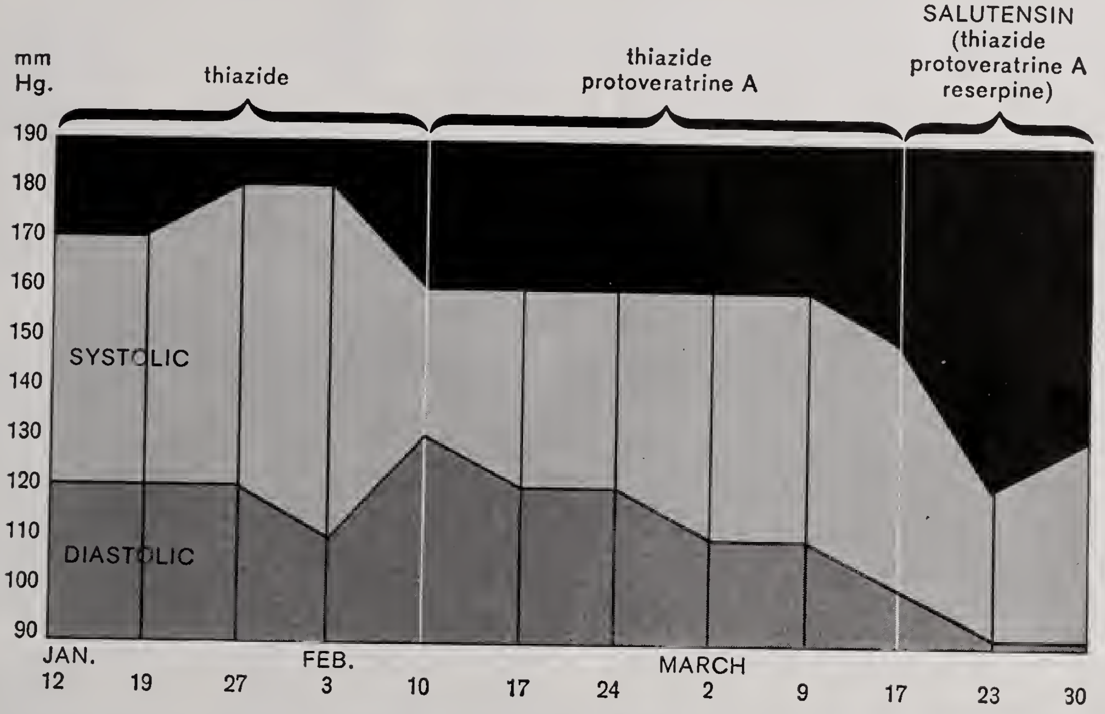
Supplied: Bottles of 60 scored tablets.

References: 1. Fries, E. D.: In Hypertension, ed. by J. H. Moyer, Saunders, Phila., 1959 p. 123. 2. Fries, E. D.: South M. J. **51**:1281 (Oct.) 1958. 3. Finnerty, F. A. and Buchholz, J. H.: GP **17**:95 (Feb.) 1958. 4. Gill, R. J., et al.: Am. Pract. & Digest Treat. **11**:1007 (Dec.) 1960. 5. Brest, A. N. and Moyer, J. H.: J. South Carolina M. A. **56**:171 (May) 1960. 6. Wilkins R. W.: Postgrad. Med. **26**:59 (July) 1959. 7. Gifford, R. W., Jr.: Read at the Hahnemann Symp. on Hypertension, Phila. Dec. 8 to 13, 1958. 8. Fries, E. D., et al.: J. A. M. A. **166**:137 (Jan. 11) 1958. 9. Ford, R. V. and Nickell, J.: Ant. Med. & Clin. Ther. **6**:461, 1959.

all the antihypertensive benefits of thiazide-rauwolfia therapy plus the specific, physiologic vasodilation of protoveratrine A

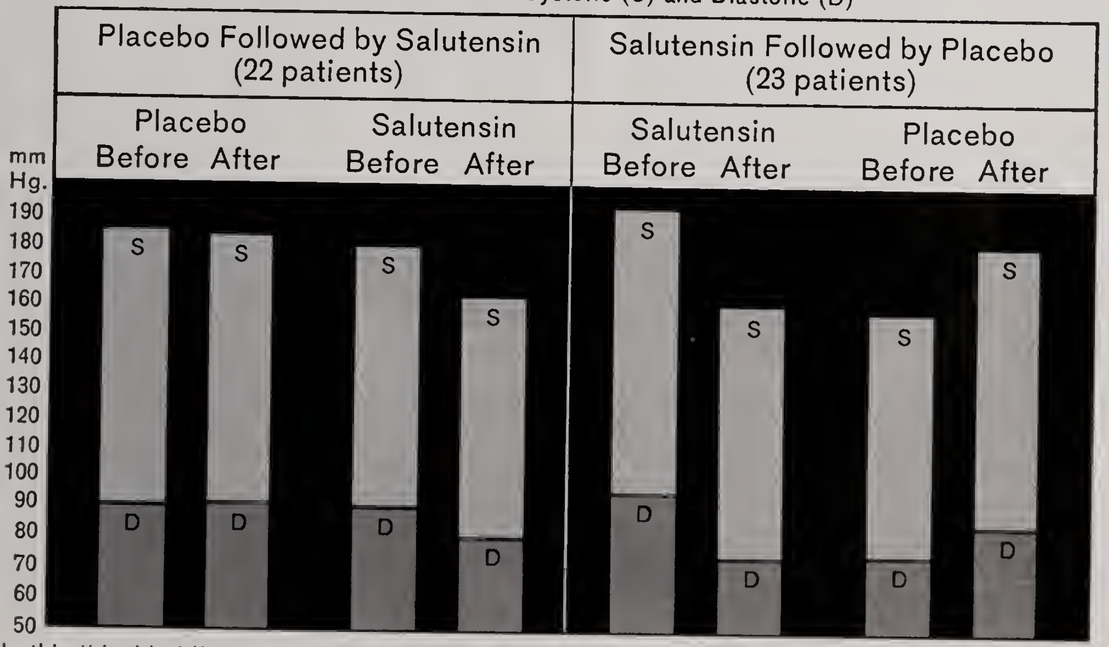
11 WEEKS TO LOWER BLOOD PRESSURE TO DESIRED LEVELS BY SERIAL ADDITION OF THE INGREDIENTS IN SALUTENSIN IN A TEST CASE

(Adapted from Spiotta, E. J.: Report to Department of Clinical Investigation, Bristol Laboratories)



3½ WEEKS TO LOWER BLOOD PRESSURE TO DESIRED LEVELS USING SALUTENSIN FROM THE START OF THERAPY IN A "DOUBLE BLIND" CROSSOVER STUDY

Mean Blood Pressures—Systolic (S) and Diastolic (D)



In this "double blind" crossover study of 45 patients, the mean systolic and diastolic blood pressures were essentially unchanged or rose during placebo administration, and decreased markedly during the 25 days of Salutensin therapy. (Smith, C. W.: Report to Department of Clinical Investigation, Bristol Laboratories.)

BRISTOL LABORATORIES / Div. of Bristol-Myers Co., Syracuse, N.Y.

when occupational allergies strike

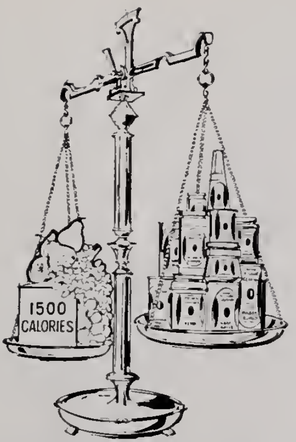
CONTINUOUS 10-12 HOUR ACTION

Dimetane® Extentabs®

brompheniramine maleate 12 mg.

reliably relieve the symptoms... seldom affect alertness

Also available in conventional tablets, 4 mg.; Elixir,
2 mg./5 cc.; Injectable, 10 mg./cc. or 100 mg./cc.
A. H. ROBINS CO., INC., RICHMOND 20, VA.
MAKING TODAY'S MEDICINES WITH INTEGRITY
... SEEKING TOMORROW'S WITH PERSISTENCE



A new answer to one of America's leading health problems

60 DELICIOUS FOODS THAT MAKE WEIGHT CONTROL EASIER!

Here is a practical and down-to-earth method to help overcome obesity, the nation's No. 1 diet problem—and prime stealer of doctor's consultation time. Now a new group of 60 delicious Mott's Figure Control Food products uses the best of nutrition knowledge to create quality dishes, lower in calories by an average of 50%. Indicated calorie savings can be made pleasantly and accurately while eating normal-size portions by using these calorie-controlled foods in place of higher calorie dishes. Protein, vitamin and mineral food values are retained.

Low carbohydrate, low fat: Fats are largely extracted from meats and poultry in a way that cannot be done at home. Sauces and dressings are prepared with a high proportion of non-fat milk solids, vegetable colloids, all are delectably "natural" and tempting in flavor. Fruits, juices, desserts and sauces are prepared where indicated with non-caloric sweeteners—natural fruit values are intact, extra sugars reduced. The carbohydrate, protein and fat content appears on all labels along with the calorie count. Useful for diabetic diets, too.

Easy medical tool for doctors: Less need for drugs, no possible dangerous side effects, not even temporary dislocation of meal patterns. Figure Control Foods include: Soups, Meats & Poultry, Popular Sauces, Salad Dressings, Preserves, Syrup, Fruits, Drinks, Desserts and Sweeteners.

New Mott's Figure Control® Foods offer Good Eating at Half the Usual Calories

	Quantity	Figure Control Calories	"Regular" Food Calories
Apple-Grape Drink	½ cup	20	52
Five-Fruit Juice Breakfast Drink	½ cup	20	52
Braised Beef and Vegetables	6½ oz.	184	380
Meat Balls in Brown Gravy	3½ oz.	84	280
Chopped Chicken Livers	1 oz.	31	100
Chicken a la King	3 oz.	72	230
French Style Dressing	1 tbsp.	10½	60
Brown Gravy	1 tbsp.	7	21

	Quantity	Figure Control Calories	"Regular" Food Calories
Applesauce	½ cup	48	90
Fruit Cocktail	½ cup	44	90
Cherry Pie Filling	1 oz.	20	60
Chocolate Topping	1 tbsp.	8	63
Preserves (Peach, Strawberry)	1 tbsp.	9	55
"Maplette" Syrup	1 tbsp.	9	55
Liquid or Powder Sweetener	(to equal 1 tbsp. of sugar)	0	16

MOTT'S FIGURE CONTROL
BEEF SLICES
TOMATO SOUP
PEACHES
VEGETABLE JUICE COCKTAIL
STRAWBERRY PRESERVES
SPAGHETTI SAUCE

Complete menus, recipes, calorie chart available for professional distribution, with weight control guides you can distribute with confidence: all menus meet N.R.C. Recommended Daily Allowances. **Use this handy order form:**

FIGURE CONTROL FOODS
Duffy-Mott Company
370 Lexington Avenue
New York 17, New York

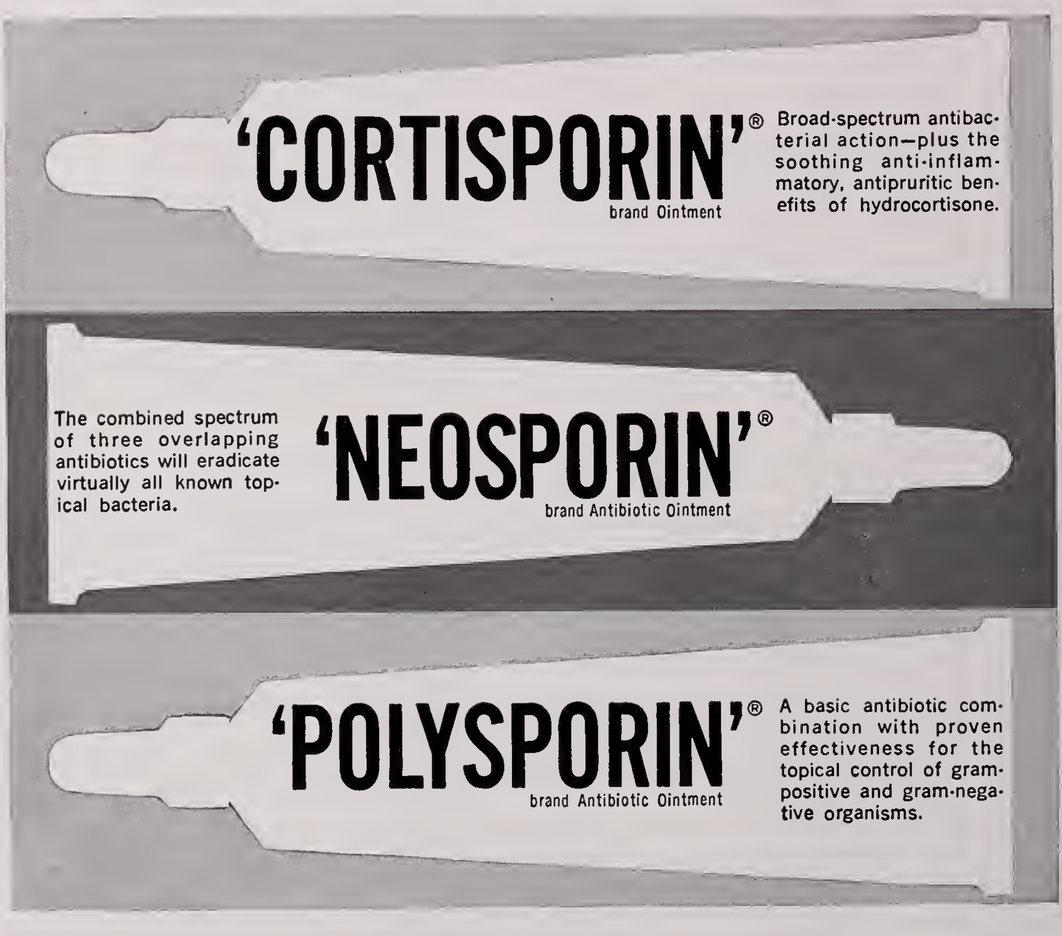
Please send____free copies of YOUR WEIGHT CONTROL PLAN for use with patients.

Dr.____________________

Address:____________________

City:__________ Zone:____ State:______

'B. W. & Co.' 'Sporin' Ointments
rarely sensitize . . .
give decisive bactericidal action
for most every topical indication


'CORTISPORIN'®
brand Ointment
'NEOSPORIN'®
brand Antibiotic Ointment
'POLYSPORIN'®
brand Antibiotic Ointment

Broad-spectrum antibacterial action—plus the soothing anti-inflammatory, antipruritic benefits of hydrocortisone.

The combined spectrum of three overlapping antibiotics will eradicate virtually all known topical bacteria.

A basic antibiotic combination with proven effectiveness for the topical control of gram-positive and gram-negative organisms.

Contents per Gm.	'Polysporin'®	'Neosporin'®	'Cortisporin'®
'Aerosporin'® brand Polymyxin B Sulfate	10,000 Units	5,000 Units	5,000 Units
Zinc Bacitracin	500 Units	400 Units	400 Units
Neomycin Sulfate	—	5 mg.	5 mg.
Hydrocortisone	—	—	10 mg.
Supplied:	Tubes of 1 oz., ½ oz. and ⅛ oz. (with ophthalmic tip)	Tubes of 1 oz., ½ oz. and ⅛ oz. (with ophthalmic tip)	Tubes of ½ oz. and ⅛ oz. (with ophthalmic tip)

BURROUGHS WELLCOME & CO. (U.S.A.) INC., Tuckahoe, New York

Emotional control regained...a family restored... thanks to a doctor and 'Thorazine'

During the past seven years, 'Thorazine' has become the treatment of choice for moderate to severe mental and emotional disturbances because it is:

- specific enough to relieve underlying fear and apprehension
- profound enough to control hyperactivity and excitement
- flexible enough so that in severe cases dosage may be raised to two or three times the recommended starting level

Experience in over 14,000,000 Americans confirms the fact that, in most patients, the potential benefits of 'Thorazine' far outweigh its possible undesirable effects.

Smith Kline & French Laboratories SK&F

Thorazine®
brand of chlorpromazine

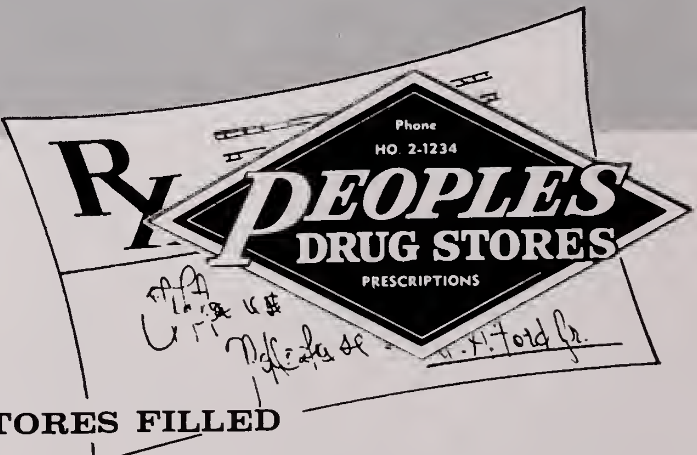
A fundamental drug
in both office and hospital practice

Posed by professional models.

For prescribing information, please see PDR or SK&F literature.

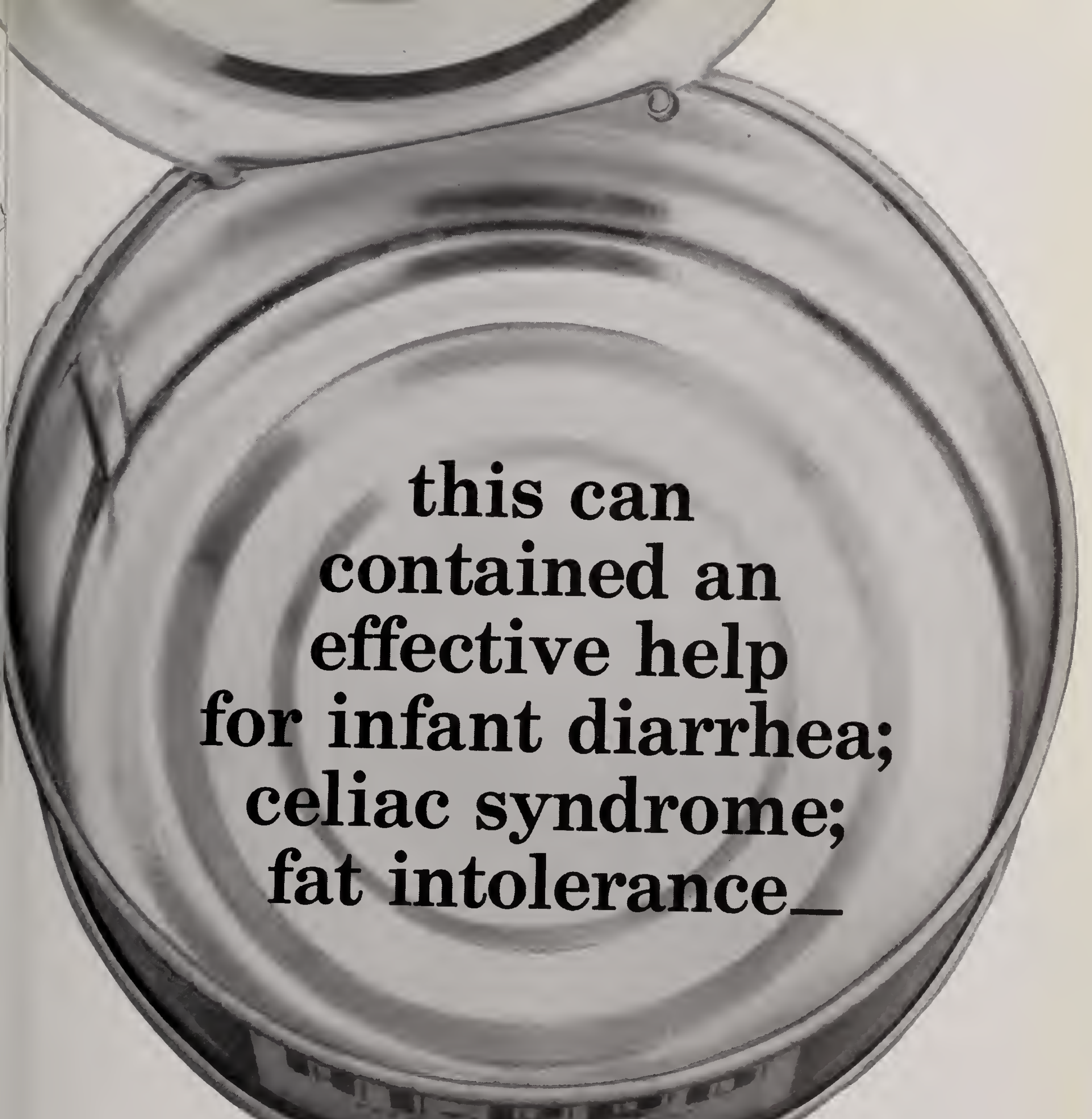
every
7
seconds

Peoples Drug Stores
Filled A Prescription
In 1961!


Rx
Phone
HO. 2-1234
PEOPLES
DRUG STORES
PRESCRIPTIONS

PEOPLES DRUG STORES FILLED

4,424,474 PRESCRIPTIONS IN 1961



this can
contained an
effective help
for infant diarrhea;
celiac syndrome;
fat intolerance_

HI-PRO
HIGH PROTEIN
LOW FAT
COW'S MILK
JACKSON MITCHELL PHARMACEUTICALS INC
CULVER CITY CALIF

-Pro contains Protein 41%;
t 14%; Lactose 35%. Avail-
le in 1-lb. and 2½-lb. cans.

AND IT'S FREE

SEND ME MY FREE SAMPLE OF HI-PRO, 2 OZ. SIZE

Mail to: Jackson-Mitchell Pharmaceuticals, Inc.
10401 Virginia Ave., Culver City, California
Babying Americans since 1934

Name ____________________

Address ____________________

City ____________ Zone ______ State ________

ESTABLISHED 1873 WOMEN ASSISTANTS

In Washington and Suburbs

CALL COLUMBIA 5-7023
(*Six Trunk Lines*)

The S. H. Hines Company

Funeral Home

2901-03-05-07 FOURTEENTH STREET N.W.
Northeast corner Harvard and 14th Streets

W. R. FRANK HINES
President and General Manager

MODERN AIR-CONDITIONED ROOMS WITH CHAPEL, PIPE ORGAN AND REPOSING ROOMS ARRANGED TO MEET EVERY REQUIREMENT AT NO ADDITIONAL CHARGE. CREMATIONS.

No forfeiture of VETERAN'S BURIAL ALLOWANCE
THE EXPENSE IS A MATTER OF YOUR OWN DESIRE

No Branch Establishments
Convenient parking facilities adjoining Funeral Home

THIS IS THE COLOR OF PROTECTION

BETADINE–The only germicide whose color indicates a germ-free environment—provides lasting protection and is the most potent non-irritating topical antiseptic known.

**for the first time...
a universal microbicidal agent
that does not sensitize
or retard healing**

Betadine®

Povidone-Iodine NND

Kills bacteria, viruses, fungi, yeasts and protozoa on contact. Non-injurious to skin, exposed tissue or mucous membranes.

Products available: Betadine Solution • Betadine Aerosol Spray • Betadine Vaginal Douche • Betadine Vaginal Gel • Betadine Shampoo • Betadine Ointment • Betadine Swab Aids • Betadine Surgical Scrub •

TAILBY NASON COMPANY, INC.
Dover, Delaware Established 1905

In the Southeastern States Distributed by
PHYSICIANS PRODUCTS CO., INC.
Petersburg, Va. Literature on request

MEDICAL ANNALS

OF THE DISTRICT OF COLUMBIA

Editorial and Business Offices: 1718 M Street, N.W., Washington 6, D. C.

Editor

Wallace M. Yater, M.D.

Managing Editor

George W. Cooley

Assistant Editor

A. Louise Eckburg

EDITORIAL BOARD

Frederic G. Burke, M.D.
I. Phillips Frohman, M.D.
Winfred Overholser, M.D.
Thomas M. Peery, M.D.
Herbert P. Ramsey, M.D.
George E. Schreiner, M.D.
Donald Stubbs, M.D.
Charles Stanley White, M.D.

CONSULTING EDITORS

Irving B. Brick, M.D.
Professor of Medicine,
Georgetown University School of Medicine

Captain Thomas E. Cone, Jr., MC, USN
Chief, Pediatric Service, United States Naval Hospital

W. Montague Cobb, M.D.
Professor of Anatomy
Howard University College of Medicine

Vernon Knight, M.D.
Clinical Director, National Institute of Allergy and Infectious Diseases, National Institutes of Health

Walter Kurland, M.D.
Admitting-Personnel Physician,
Veterans Administration Hospital

Colonel Conn L. Milburn, Jr., MC, USA
Director, Walter Reed Army Institute of Research, Walter Reed Army Medical Center

Alvin E. Parrish, M.D.
Associate Professor of Medicine, and Associate Dean,
George Washington University School of Medicine

Colonel Frank M. Townsend, MC, USAF
Director, Armed Forces Institute of Pathology

THE MEDICAL SOCIETY OF THE DISTRICT OF COLUMBIA

1962

OFFICERS

J. Spencer Dryden, *President*
Karl C. Corley, *President-elect*
Frank S. Pellegrini, *First Vice President*
Naomi M. Kanof, *Second Vice President*
Mr. George W. Cooley, *Secretary-Treasurer*

EXECUTIVE BOARD

James W. Watts, *Chairman, term expires 1962*
W. LeRoy Dunn, *term expires 1963*
Victor R. Alfaro, *term expires 1964*
Duane C. Richtmeyer, *term expires 1965*

Ex Officiis

J. Spencer Dryden
Raymond T. Holden
Karl C. Corley
Mr. George W. Cooley, *Secretary*

BOARD OF CREDENTIALS

Edward W. Nicklas, *Chairman, term expires 1962*
William A. Howell, *term expires 1963*
Luther W. Gray, *term expires 1964*

DELEGATES

American Medical Association

Raymond T. Holden
C. Willard Camalier, Jr.
Clifton R. Gruver, *Alternate*
Thomas M. Peery, *Alternate*

LEGAL COUNSEL

Warren E. Magee

ENDOCRINE AND PHARMACEUTICAL PRODUCTS OF QUALITY
Organon

An important announcement to physicians who prescribe corticosteroids

Organon's new technical process now makes one of the newer, most highly potent and well tolerated corticosteroids available at greatly reduced cost to your patients with allergic, arthritic or other inflammatory conditions.

This new product is being marketed under the trade name of HEXADROL, brand of dexamethasone 'Organon'. HEXADROL is now being offered to your pharmacist at a price which should make it available to your patients at a cost well within the price range of older generically prescribed corticosteroids. It is supplied as 0.75 mg. white scored tablets, in bottles of 100.

If you have been prescribing the older corticosteroids— such as prednisone, prednisolone, hydrocortisone or cortisone, and have hesitated to prescribe the newer corticosteroids because of economic consideration for your patients, you can now secure all of the clinical advantages of dexamethasone at approximately the same prescription expense. Mg. for mg., HEXADROL is approximately 6 times more potent than triamcinolone or methylprednisolone...8 times more potent than prednisone or prednisolone...28 times more potent than hydrocortisone...and 35 times more potent than cortisone.

If you are now prescribing the newer corticosteroids— such as triamcinolone, betamethasone, paramethasone or another brand of dexamethasone, because of reduced risk of sodium and fluid retention, potassium depletion, or disturbance of glucose metabolism—you can obtain all of these benefits with HEXADROL, at marked savings—yet with complete assurance of unsurpassed quality and therapeutic effect.

For complete information concerning HEXADROL— including indications, dosage, precautions and side effects—or if you would like a trial supply, ask your Organon Representative, or write to: Director, Professional Services, Organon Inc., West Orange, N. J.

'Organon'—your professional assurance of quality
Hexadrol®—your patient's assurance of economy!

1.
2.
3.
4.
5.
6.
Panalba
Panalba
Panalba

1. ***In otitis media*** **2.** ***In pyoderma***
3. ***In laryngopharyngitis***
4. ***In bacterial pneumonia***
5. ***In bronchiectasis*** **6.** ***In osteomyelitis***

In these and other bacterial infections, give Panalba* in addition to the usual surgical or other appropriate therapeutic measures. *From the outset,* pending laboratory determinations, your treatment broadens in antibacterial coverage because of the simultaneous administration of two antibiotics that complement each other. They were carefully chosen for this purpose.

Panalba combines tetracycline (selected for its breadth of coverage) and novobiocin (selected for its unique effectiveness against staph). That is why, in most infections of unknown etiology, Panalba offers excellent chances for therapeutic success.

Reminder advertisement. Please see package insert for detailed product information.

Upjohn

THE UPJOHN COMPANY
KALAMAZOO, MICHIGAN

*TRADEMARK, REG. U.S. PAT. OFF. COPYRIGHT 1962, THE UPJOHN COMPANY

Relieves
Anxiety
and
Anxious
Depression

The outstanding effectiveness and safety with which Miltown relieves anxiety and anxious depression—the type of depression in which either tension or nervousness or insomnia is a prominent symptom — has been clinically authenticated time and again during the past six years. This, undoubtedly, is one reason why physicians still prescribe meprobamate more often than any other tranquilizer in the world.

Clinically proven
in over 750
published studies

1 Acts dependably — without causing ataxia or altering sexual function

2 Does not produce Parkinson-like symptoms, liver damage or agranulocytosis

3 Does not muddle the mind or affect normal behavior

Miltown®
meprobamate (Wallace)

Usual dosage: One or two 400 mg. tablets t.i.d.
Supplied: 400 mg. scored tablets, 200 mg. sugar-coated tablets; bottles of 50. Also as MEPROTABS® — 400 mg. unmarked, coated tablets; and in sustained-release capsules as MEPROSPAN®-400 and MEPROSPAN®-200 (containing respectively 400 mg. and 200 mg. meprobamate).

CM 6709

WALLACE LABORATORIES / *Cranbury, N. J.*

Insurance For The Doctor

Russell, Marsh & Kennedy, Inc.
(formerly Hufty, Eubank & Russell, Inc.)

WILLIAM G. RUSSELL
President
1832 M St., N.W.
FEderal 8-7600

PROFESSIONAL LIABILITY*
EMPLOYEES' WORKMEN'S COMPENSATION
EQUIPMENT FLOATER
FIRE INSURANCE CONTENTS
BUSINESS EXPENSE DISABILITY
BONDS ON EMPLOYEES
AUTOMOBILE INSURANCE
OFFICE PUBLIC LIABILITY

ANNUITIES—FIXED & VARIABLE
NON-CAN DISABILITY INCOME
LOW COST TERM LIFE INSURANCE
PENSION PLANS FOR DOCTORS
PENSION PLANS FOR EMPLOYEES

**Endorsed by* MEDICAL SOCIETY OF D. C.

Coca-Cola, too, is compatible with a well balanced diet. As a pure, wholesome drink, it provides a bit of quick energy . . . brings you back refreshed after work or play. It contributes to good health by providing a pleasurable moment's pause from the pace of a busy day.

DRINK
Coca-Cola
TRADE-MARK ®

New from SAUNDERS

Just Ready! **Kline & Lehmann—**

Handbook of Psychiatric Treatment in Medical Practice

A Storehouse of Practical Advice for the Nonpsychiatrist on Handling the Psychiatric Patient! In simple everyday language, this new book tells you why it is often preferable for the average psychiatric patient to be treated by his family doctor rather than by a psychiatrist. The authors tell you when to refer a patient; which patients you should **not** treat (*arsonists, addicts, homicidal patients, exhibitionists*) and why. Here is only a sample of the problems for which you'll find satisfying answers: *How much psychiatry does the medical practitioner need to know?* Which neurotics should you treat? *What is the prognosis for psychiatric patients?* Do you have time to do psychotherapy? *What are the factors in selecting a psychopharmaceutical?* What are the stigmata of impending suicide? *How to diagnose anxiety?* A special 12-page section lists dosage schedules for all useful psychopharmaceuticals.

By Nathan S. Kline, M.D., F.A.C.P., Rockland State Hospital, Orangeburg, N.Y.; Department of Psychiatry, Columbia University College of Physicians and Surgeons; and Heinz Lehmann, M.D., Verdun Protestant Hospital, Montreal; Department of Psychiatry, McGill University Faculty of Medicine. About 114 pages, 6″x9¼″. About $3.50. *New—Just Ready!*

Just Published! **Finneson—**

Diagnosis and Management of Pain Syndromes

A Concise and Well Illustrated Guide to Handling Those Pain Syndromes You Meet in Daily Practice! For each painful sensation — ranging from *headache* to *intractable pain due to cancer*—the author describes location and nature, differential diagnosis, pathophysiology and management. Drug therapy, physical therapy, major and minor surgery are all covered. Dr. Finneson begins with a comprehensive discussion of the anatomic and physiologic nature of pain, covering both its physical and psychologic effects. Effective management is then described and illustrated for such specific problems as: *Facial pain—Low-back pain and sciatica—Visceral pain of the chest and abdomen—Neck pain and cervicobrachial neuralgia — Pelvic and perineal pain—Peripheral vascular pain— Causalgia, painful scars and post-infection neuralgia.* A few of the many practical discussions include: Toxic reactions to drugs—Surgery for trigeminal neuralgia—Traction for acute cervical pain—Treatment of phantom limb pain—etc.

By Bernard E. Finneson, M.D., F.A.C.S., Neurosurgeon, The Episcopal Hospital, Philadelphia. 261 pages, 6½″x9¾″, 166 illustrations. $8.50 *New—Just Published!*

New (2nd) Edition! **By Paul Williamson, M.D.**

Office Procedures

Hundreds of Common Sense Procedures to Help Make Diagnosis Easier but More Accurate, to Help Make Treatment Simpler but More Effective! This time-saving book gives you precise descriptions on how to perform such procedures as cauterization of the cervix, proctoscopy, hearing tests, repair of wounds, office anesthesia. Dr. Williamson tells you how to use the instruments and equipment you have to best advantage and how to improvise when necessary with common articles like hairpins, paper clips, and coat hangers. For this edition new sections are incorporated on *office psychiatry* and on *management of geriatric patients.* Among the score of other important changes are: *a new section on examination of the newborn*—new material on radiologic examination of fractures of the limbs—*new office tests for hiatal hernia of the esophagus*—expansion of the section on physical therapy—*coverage of disorders of the breast in the section on minor surgery.*

By Paul Williamson, M.D. Illustrated by Ann Williamson. About 460 pages, 8″x10¼″, 1090 illustrations. About $13.50. *New (2nd) Edition—Ready September!*

Mail Coupon Below!

Saunders Books

Order from

W. B. SAUNDERS COMPANY
West Washington Square Philadelphia 5

Please send when ready and bill me:

☐ Kline & Lehmann's Psychiatric Treatment in Medical Practice, about $3.50

☐ Finneson's Diagnosis & Management of Pain Syndromes, $8.50

☐ Williamson's Office Procedures, about $13.50

Name ....

Address ....

.... SJG 8-62

If you have patients on a cholesterol depressant diet, this will be welcome news:

General Mills is now making available, through grocery stores, a Safflower Oil which is totally acceptable in the diet, and which is priced reasonably.

SAFF·O·LIFE

Safflower Oil

14 FL. OZ
Betty Crocker
poly-unsaturated
Saff-o-life®
SAFFLOWER OIL
for salads, baking and frying
Freshness preserved with BHA, BHT, propyl gallate, citric acid in propylene glycol.
General Mills

As you know, Safflower Oil is higher in poly-unsaturates and lower in saturated fats than any other type of readily available vegetable oil.

When an increased poly-unsaturated fatty acid intake is desirable, you can recommend Saff-o-life Safflower Oil. You can do so with the assurance that the patient will find it completely appetizing—clear, light and fresh-smelling—and priced at a level which poses no problem.

Ratio of Linoleates* to Saturates
*(Poly-Unsaturates)

SAFFLOWER OIL • 9.0 to 1.0
CORN OIL • 5.3 to 1.0
SOYBEAN OIL • 3.5 to 1.0
COTTONSEED OIL • 2.0 to 1.0
PEANUT OIL • 1.6 to 1.0

Physicians who wish recipes using Saff-o-life Safflower Oil are invited to write directly to General Mills, Inc. Address your inquiries to Professional Services Director, General Mills, Inc.
Dept. 120, 9200 Wayzata Blvd.,
Minneapolis 26, Minnesota.

asthma attack averted
. . . in minutes

patient protected
. . . for hours

Nephenalin®
(the dual-action anti-asthmatic tablet)

. . . works with nebulizer speed—provides four-hour protection

One NEPHENALIN tablet provides: *air in a hurry*—through sublingual isoproterenol HCl, 10 mg. *air for hours*—through theophylline, 2 gr.; ephedrine, 3/8 gr.; phenobarbital, 1/8 gr.
Dosage: Hold one NEPHENALIN tablet under the tongue for five minutes to abort the asthmatic attack promptly. Then swallow the tablet core for four full hours' protection against further attack. Only one tablet should be taken every four hours. No more than five tablets in 24 hours.
Supplied: Bottles of 50 tablets. For children: NEPHENALIN Pediatric, bottles of 50 tablets.
Caution: Do not administer NEPHENALIN with epinephrine. The two medications may be alternated at 4-hour intervals. NEPHENALIN should be administered with caution to patients with hyperthyroidism, acute coronary disease, cardiac asthma, limited cardiac reserve, acute myocardial damage, and to those hypersensitive to sympathomimetic amines. Phenobarbital may be habit forming. THOS. LEEMING & CO., INC., New York 17, N.Y.

a look at the literature
CORDRAN™
(flurandrenolone, Lilly)

“Treatment results were good, and in many cases a dramatic response was noted. Many of the cases had previously failed to respond to various types of therapy including, in some instances, other topical corticosteroid preparations.”

—Gray, H. R., Wolf, R. L., and Doneff, R. H.: Evaluation of Flurandrenolone, a New Topical Corticosteroid, Arch. Dermat., *84:*18, 1961.

A look at the products—Cordran cream and ointment are new corticosteroid preparations especially formulated for the skin. Each Gm. contains 0.5 mg. Cordran.

Cordran™-N cream and ointment combine Cordran and the wide-spectrum antibiotic, neomycin. Each Gm. contains 0.5 mg. Cordran and 5 mg. neomycin sulfate (equivalent to 3.5 mg. base). Cordran-N is particularly useful in steroid-responsive dermatoses complicated by potential or actual skin infections.

All forms are supplied in 7.5 and 15-Gm. tubes.

Cordran™-N (flurandrenolone with neomycin sulfate, Lilly) This is a reminder advertisement. For adequate information for use, please consult manufacturer's literature. Eli Lilly and Company, Indianapolis 6, Indiana. 240241

Lilly
QUALITY/RESEARCH/INTEGRITY

MEDICAL ANNALS
of the District of Columbia

August 1962 VOLUME XXXI • NUMBER 8

Emotional Aspects of Youth Fitness*

JAMES PATRICK SCANLON, M.D.
Clinical Associate Professor of Psychiatry, Georgetown University School of Medicine

THESE ARE EPOCHAL DAYS in which we live. History is being decided at its deepest level, wherein civilization as we know it is at stake. We must live history in order to appreciate the historic moment. One cannot watch and then later adjust or he may find his existence drastically altered.

While living history we must also have a basis of operation outside of history in order to act and participate in the shaping of things to come.

This is true for each and every one of us today, for we are all engulfed, willingly or unwillingly, in the incessant Cold War that daily rages on all fronts around this shrinking globe.

From the Atomic Age we have just recently vaulted into the Space Age, but this again is also subordinate to the ceaseless scientific struggle for political and military supremacy.

The vast differences between Communism and our own democratic way of life are well known, or certainly should be, to everyone.

Essentially it is a diametrical opposition between philosophical, religious and ideological frames of reference. There is a vast difference in human values between religious conviction and atheism, individual freedom and dignity versus enslavement, the sanctity of the home versus state ownership, and all the other antitheses.

The traditional view of man, society, history and civilization as we have known it for over four thousand years is in the balance.

The opposition has openly and arrogantly declared its intention to overthrow every existing government, régime, system, philosophy and religion.

For us Jesus Christ in person, as He predicted, is again on trial. Since the Communist Manifesto of 1848 a real ideologic war has been waged, not in the customary methods but in the psychologic approach. It is by means of "indirect aggression" that the opposition seeks to possess the souls and minds of men everywhere.

The vaunted "new Soviet Man," the product of years of Pavlovian conditioning and thorough brain-washing, is intended to be the prototype of all future men.

We must examine our own philosophical, cultural, political and psychological fitness to meet this challenge. A close survey of our daily living is somewhat discouraging when we constantly read of murder, suicide, rape, mental illness, divorce, tax-evasion, racketeering, school drop-outs, juvenile delinquency, drug addiction, and the general attitude of the-public-be-damned.

---

* Read before the Louis Mackall Medical Society in Washington, D. C., March 15, 1962.

In industrial medicine the three A's are the foremost problem: (1) alcoholism (2) accident-proneness, and (3) absenteeism.

Our youth look to the elders for leadership in truth, honesty, spiritual values, and all the other basic tenets in human relations.

Our youth are also called upon to do the actual fighting in wars, and they will inherit the New Frontiers of tomorrow and tomorrow and tomorrow.

Our youth must be emotionally prepared and fit to achieve the broad vistas of the future. We must determine to prevent the avowed objective of an atheistic opposition that these same vistas will not end in lost horizons. This will require a concerted contribution from men in all walks of life, and general medicine will certainly participate in this essential project.

Psychiatry is interested in the individual and the significant people surrounding him at all ages and in every cultural milieu. As a specialty we approach the individual from a total or holistic standpoint. This means that the question of emotional fitness can only be understood in the framework of both the psyche and the soma. How these interacting units operate together, or oppose each other, must be assayed in a fractional analysis. From this we realize the reasons for efficient or inefficient adjustment of the complete organism to its environment. However, youth fitness encompassing the eras of childhood, adolescence, and early adulthood is of special interest. This special interest in the emotional fitness of the young revolves about the tremendous opportunity offered in the field of preventive psychiatry. At the same time greater dividends may be expected where corrective measures through psychotherapy and mental hygiene are applied early to the damaged personality rather than later or late. Chronicity does not militate against salvageability but is rather like the old adage, "An ounce of prevention is worth a pound of cure."

The developmental years merit particular attention since the emotional growth, concomitantly paralleling the physical growth, is influenced from birth by the significant people in the life of the individual.

Significant people would be identified as parents or foster (substitute) parents, siblings, teachers, members of the clergy, friends, or anyone who has had a close or special relationship to the growing individual.

Emotionally traumatic or damaging experiences occurring during the early or late formative years, with any or all of these significant relationships, may leave a permanent imprint on the unfolding personality.

Modern or dynamic psychiatry has advanced to the point that it understands in large measure the human being's emotional growth toward maturity.

Likewise, there is increasing knowledge of interpersonal relationships to ascertain what obstructs this growth, thus leading to emotional immaturity.

As Plato admonished us to "avoid the extremes," this advice, the origin of which has been lost in the mists of antiquity, would still best serve our purpose here today.

The extreme of psychologic immaturity or maladjustment, observed in the schizophrenic, concerns us only indirectly since this is a gross form of the emotional misfit. Likewise, the organic syndromes of senile deterioration or mental deficiency, both demonstrating regressive features due to somatic damage, would again be in the same category.

Although the psychotic patients occupy over 500,000 hospital beds per day, they consist of a mere fraction as compared to the neuroses. The latter approximate more the average individual and thus interest us in terms of an approach to the ideal concept of emotional fitness. To illustrate this point it might be stated that neurosis results from the emotional trials and tribulations of living from which no human being escapes.

Understanding the neuroses gives us an insight into the so-called normal or average individual with his overt and hidden hates and loves, fears and hopes, which he himself may only vaguely appreciate, if at all. In essence it is to know the motivations which drive all men, thus producing alleged normalcy or deviations from the same criteria.

Neurosis represents a failure in adaptation, basically emotional, in which the personality relinquishes mature reactions and partially regresses to earlier or immature patterns of adjustment. Some individuals reflect such a faulty emotional development that their psychologic functioning is always highly precarious even when the environment is most favorable.

Other individuals, being more mature, may react with neurotic symptoms only when exposed to the most severe and prolonged stress as witnessed in combat conditions of World War II.

Both civilian and military clinical experience has established the psychologic fact that every individual possesses a specific emotional vulnerability. Prolonged stress, of sufficient intensity, reveals any man's emotional Heel of Achilles, a psychologic threshold he cannot exceed. This is true since the human organism is a finite being and therefore cannot attain perfection but only valiantly strive toward it.

Under prolonged stress, frustration, pain, fear, or excessive physical taxation every animal organism reacts with a physiologic and psychologic mobilization for flight or fight. The associated subjective feeling (emotion) is either one of anger and or fear, which if expressed outwardly may produce aggressive attack or the opposite in attempts to withdraw or retreat.

If, due to a specific emotional vulnerability combined with a weakening of the inner powers of control, these associated emotional reactions are automatically banished from conscious awareness (repressed), they can then be indirectly expressed in a variety of substitute equivalents.

These substitute forms are psychologic and physiologic reactions of a regressive type leading to unconsciously motivated misbehavior, partial return to childish patterns of adjustment, free-floating anxiety, phobias, inner tension, nightmares, and a host of other "neurotic" symptoms.

In "psychosomatic medicine," for instance, these same repressed emotional forces can be observed in various clinical syndromes. A brief and oversimplified example would be psychologically banished fight impulses indirectly and physiologically expressed (somatized) in terms of hypertension. On the other hand, banished flight impulses are often vicariously expressed in the form of a gastric ulcer, mucous and spastic colitis, and the functional diarrheas.

In another diagnostic category the strictly emotional illness, a combination of both aggressive and withdrawal drives, may unconsciously motivate the prevalent syndrome of depression.

From various sources of clinical experience we can dynamically conclude that the mature (fit) individual possesses a relatively complete or adult emotional development with a high degree of adaptability, low regressive tendencies, and a minimal quantity of emotional vulnerability from his childhood conditioning.

The immature individual, on the other hand, shows an internal predisposition toward regressive or infantile levels of adaptation due to a higher degree of emotional vulnerability combined with an incomplete personality development (the misfit). These identifying marks of maturity or immaturity result from the individual's emotional conditioning in childhood. In this regard the attitudes and feelings of the parents toward the child is the pivotal point rather than vice versa. The matrix of the personality is forged in the crucible of the parent-child relationship and secondarily with other significant people during the formative years. Specific characteristics of emotional fitness resulting from the parent-child relationship is the equation of psychologic dependency or independence. The latter is achieved by emotional emancipation from the protective parents in phases and stages of growth.

As we all realize, the embryonic life, neonatal state, and the early childhood years are necessarily parasitic and then later comes almost complete dependence for the child in the relationship with the parents. With school, playmates in the community, advancing physical growth and the associated educational process, this dependency is gradually diluted.

With early and late adolescence nature's trend toward independence eventually reaches fruition, although this must be achieved over the inclination to cling, to be protected, to be supported, and to enjoy the childhood absence of major responsibility.

Unfortunately, in the animal kingdom the human being requires a much longer period of dependency, so that we sometimes remain children for so long that we never get over it. The psychologic "pull-back" toward the pleasures of childhood exists consciously, or certainly unconsciously, throughout the life-span. How often do we overhear the wishful longing to return to the scenes of boyhood, or girlhood, in the inadvertent expression, "Brother, those were the good old days." Nature's drive toward maturity and independence may be obstructed, impaired or even arrested at any and all stages by emotionally immature, therefore unfit parents.

This damage to the emotional organization of the growing child or youth is usually perpetrated by the parents due to emotional problems of their own and takes myriad forms.

For example, the parents may unwittingly play upon or foster the child's early tendency to cling and attempt thereby to dominate or bind the offspring to them.

The elders may forever try to protect the fledglings throughout life, even when they are adult, married, and financially self-supporting. Other instances show parental interference through forcing responsibility prematurely upon the young, thus producing the unconscious longing to satisfy the degree of dependency that would otherwise be average for that age.

In any event, the path to emotional fitness via maturation is obstructed by too little satisfaction of the normal dependency needs or the forced feeding of precipitous independence. Either way, the resultant excessive degree of unresolved dependence continues to be reflected in subsequent relationships throughout life. These reflections may be manifested by the repeated need to be supported, often "rescued," by relatives, friends, or employers from a variety of life-situations when increased or unexpected stress occurs.

Life's demand for an adult response will evoke the opposite through a partial regression to neurotic symptoms, alcoholism, or delinquent behavior.

At face value the emotionally unequipped person reacts inappropriately and anachronistically due to psychic forces beyond his conscious control. Another characteristic arising from problem parents and problem environments is an alteration of the give-get balance which parallels the dependence-independence equation.

If, as described, the growing child is emotionally deprived or overindulged, he may then constantly expect to receive from other significant people and thereby suffer an impairment of his capacity to give. Any frustration of the expectation to receive, or of the enjoyment of giving, leads to anger, which in turn produces unhappiness, dissatisfaction and possible depression, alcoholic excess, neurotic reactions, and even antisocial behavior.

These are the constricted personalities who are often able to give material things to their spouse or children but are psychologically blocked from giving of themselves in terms of the ability to freely give love. In turn, when a child feels a lack of parental love or thinks he is unloved, he cares little about self-control and emulating the socialized elders. "If they don't care, why should I?"

Another characteristic of emotional fitness is a healthy freedom from the frequent constellation of inferiority feelings, compulsive competitiveness, and excessive egotism. These traits all exceed the average. Since much of the child lingers underneath in the adult, it remains the source of guilt feelings for failure to be completely adult. This leads to the widespread existence of inferiority feelings and the frantic psychologic effort to deny these infantile wishes through compensatory strivings.

These strivings take the form of the prevalent drive for prestige, power, wealth, acclaim, and all the social trinkets which the child associates with the parents.

The adult often unconsciously repeats, especially toward persons in authority, much of the childhood pattern of interpersonal relatedness with attendant feelings of inferiority, inadequacy, or dependency.

These underlying childish feelings constitute an affront to the adult ego or self-esteem and are necessarily repudiated and denied through competition with parents and siblings or their later psychologic substitutes. The psychologic substitutes are superiors and co-workers, but the latent hostility is a cause for further guilt, anxiety, and inferiority feelings. This situation calls forth a greater re-application of the compensatory defenses. A vicious circle is thereby established. For mankind this is often a mad struggle to become God while pathetically remaining a beast.

Man fails to perceive the real psychologic goal in life as emotional maturity and therefore seldom achieves it.

Difficulties in living result then from the "human element" which we can now more specifically define as the childish remnants in human nature. The accent on "youth fitness" is indeed appropriate in this space age of atomic and rocket survival.

Still another characteristic of the emotionally qualified individual is derived from the training necessary for the human animal to laboriously attain socialization and acculturation. In this tedious process the parental attitudes and standards, ethical and social ideals, and the experiences of living with others are incorporated within the individual's psychic structure. The conscience (super-ego) is thus formed through the mechanism of introjection or inculcation. A value-system is thus established.

If properly integrated the conscience as a regulating and restraining influence upon behavior is certainly a positive force. The ultimate effect is to aid us in the direction of adult, moral and mature relatedness, consistent with the religious teachings of all the Ages. Within average limits to be "conscientious" is to be adult. Ascending the heights from different directions, here psychiatry and religion meet at the summit in mutual agreement. We have long since learned that because of too little or too lax training the individual may become an infantile, impulse-prone older person. The inhibited individual results from too early or too harsh training. The conscience has become, in turn, too strict and remains essentially pathologic. Inconsistent training produces confusion and results in indecisiveness.

Despite heroic educational efforts of psychiatry, pediatrics and general medicine, much ignorance still pervades the domain of child-rearing.

In the family circle we often find the parents using themselves as the yardstick to be applied along with the hickory stick to the growing child. The amorphous and pliable psyche must be fitted to some preconceived mold. This is, indeed, the modern version of the Procrustean bed of Greek mythology.

The skein of this parental attitude is basically conscious and unconscious in origin and fails to realize, despite intelligence, that the child grows through love and identification. It is not what the parent says but what the parent does that is crucial. There is no substitute for good judgment, and emotional thinking is no substitute at all. The child, in God's wisdom, possesses a tremendous drive from within to navigate each higher level of adjustment, to mature to adulthood. Given patience, understanding and tolerance it will come to final fruition in its own good time.

However, some attention should be given to the role of sexuality, since this is a powerful force playing a dynamic role in the emotional development. Likewise, it is an expression of the individual's emotional organization and his degree of maturity or immaturity. Sexuality, in the psychologic sense, may serve as an outlet for all kinds of feelings and impulses. It may express loneliness or drain hate and anger. The sex athlete of the Don Juan order is really acting out his emotional need to repeatedly bolster his prestige and flagging self-esteem. Like a child, it is used for play and pleasure and not, therefore, properly integrated into the realm of affection. The prostitute, tramping through the pages of history as a "necessary evil," is, nonetheless, a gruesome example of sick behavior.

When the sexuality matures with the rest of the personality, an adult attitude prevails. It becomes an instrument for the expression of love and affection and for procreation and the satisfactions derived from parental responsibility. This is a proper balance, and the two different modes of living provide a striking contrast between the adult and the infantile, between the emotionally equipped and the ill-equipped.

Having suffered two world wars within the short span of 25 years, we should certainly give more attention to human hostility. It is, indeed, more deadly than the hydrogen bomb. Deficiencies in emotional development, when the individual internally feels constantly threatened, lead to persistent feelings of anger and hate. Man's greatest danger becomes man himself. These are the volatile emotional elements from whence come wars, crime, violence, and the gamut of human atrocities. The origin is unresolved emotional problems of childhood, the persistence of infantile hates and rages, carried into adulthood and not outgrown. Basically Hitler was an angry boy—and look what happened. In day-to-day living the internally generated hostility may be vented outwardly through displacement. This means transplanting hostility from mistreating parents or siblings to innocent victims later, in the form of wife, children, friends, or anyone who may serve as a target for revenge. Likewise, the hostility may be turned against the self and emerge masochistically in multifold forms of self-punishment, self-defeat, or a generally mismanaged life. Hostility of murderous proportions may erupt in homicide or suicide. Like purulent material it must erode to the surface and is the saga of man against himself. It is also the story of human misery self-induced in all its sadistic horror. Against this bleak background of human inhumanities is heard Christ's Sermon on the Mount, with its clarion call to moderation and consideration.

Like the oceanic tides, epochs and men ebb and flow, but the mature, healthy attitude prevails. It is not crucifixions and self-crucifixions but creativeness, normal aggressiveness, and parental solicitude which are constructive and not cruelly destructive. This is the spectral ray of hope piercing the mushroom curtain of the awesome Atomic Age.

With the sands of time running out inexorably we should mention the attributes of flexibility and adaptability. Where these characteristics are of high quality we have maturity. When the personality is rigid and inflexible we are dealing with some degree of immaturity. The child learns from the significant people who reared him what to expect from other people. In some people the childhood reactions remain powerfully fixed and dominate the behavior. These fixed reactions tend to be repeated over and over throughout life and are inappropriate, because they originate with early traumatic emotional experiences—the repetition-compulsion.

Given proper conditions, the emotional maturation will unfold spontaneously. A prevalent mistake of parents is to force their will upon the child. Unconsciously the parent often tends to treat the children and spouse as they themselves were treated. They identify with the "tyrant." "What was good enough for me is good enough for you."

A last attribute of maturity is a firm grasp of reality. Parental example to avoid deceit and illusion is most important as it distorts the value-system.

The developmental process is, in large measure, a learning process. To teach a child prejudices against race, color or creed only erects platforms for the later launching of hostility in the area of interpersonal relations. This merely burdens the youngster, because it impairs his perception and interferes with his ultimate appraisal of reality. To emphasize class-consciousness, social stratification, and the worship of materialistic status-symbols only produces an ulterior, self-centered motivation in day-to-day living. In the years to come emotional fitness rather than strictly physical fitness will give the youth of tomorrow the inner unity to overcome the Iron Curtains and Bamboo Curtains from without. Erecting Cultural Curtains and reality distortions from within can result only in restrictions imposed by a psychologic strait jacket. To survive, our youth of tomorrow will need all of the psychologic freedom for action that our parental leadership of today can provide.

SUMMARY

The emotional fitness of youth derives from the significant people surrounding the individual in the developmental years.

We have seen where the personality is forged in the matrix of the child-parent relationships toward youth-fitness or the young social misfit.

Later modifications occur via general education, religious training, political and economic influences, and the moral fibers within the cultural fabric of the Nation itself.

The glimpses presented here of the vicissitudes of personality growth toward maturation are not new. They have long been recognized by numerous observers of human behavior. They need, however, to be articulated again in clinical terms and in the medium of psychiatric education. It is hoped that something has been gained by this restatement.

1922 Eye Street, N.W.
Washington 6, D. C.

The Split-felt Plaster Collar for Ambulatory Patients

EUGENE G. LIPOW, M.D.
Washington

O. HUGH FULCHER, M.D., F.A.C.S.
Clinical Professor and Chief, Section of Neurosurgery, Georgetown University School of Medicine

THE INCIDENCE OF TRAUMATIC LESIONS of the neck has increased greatly during the past decade. Unfortunately the term, "whiplash injury," has often been used as a diagnosis. Obviously the neck is not like a whip and the designation, "whiplash," has no anatomic or scientific basis, but it does appear to evoke an emotional response. We prefer to use cervical sprain to indicate a traumatic condition produced by hyperextension and hyperflexion of the neck. In some instances the exaggerated motions of the neck have contused one or more cervical nerve roots within the intervertebral foramina associated with disruption or overstretching of the muscles and ligaments. The cervical sprains have frequently been difficult to treat successfully, especially of those patients who have impending litigation. We have observed that many such patients have been hospitalized for treatment by continuous halter traction. This has appeared to us to be an overuse of crowded hospital facilities with its resulting high cost of patient care. Obviously those patients who have suffered with dislocations and fractures of the cervical spine require hospitalization and specific treatment by specialists. Those who have suffered with cervical sprains and other minor neck ailments can almost invariably be treated successfully while ambulatory by the family doctor.

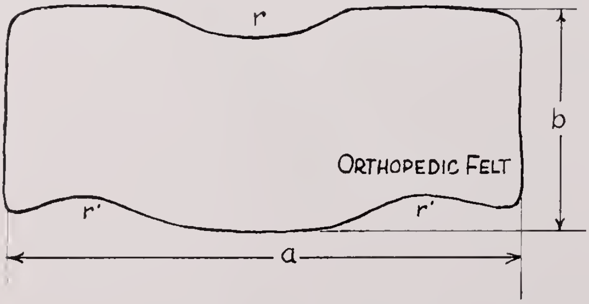


FIG. 1. Felt pattern of ½-inch orthopedic felt has been fashioned so that "r" represents a recess for the chin and jaw and "r'" a recess for each shoulder. "a"—Measurement of circumference of neck; "b"—measurement from chin to one inch below sternoclavicular joint.

During the last five years the cervical sprains of 300 patients who remained ambulatory have been treated, chiefly by the use of the "split-felt plaster collar." This collar has been made in the office. About 60 per cent of the patients received also appropriate physical therapy and injections of a local anesthetic containing corticosteroids into tender areas of the posterior cervical region.

The collar has effected adequate immobilization and has been economical and comfortable. It has been easy to apply and has been molded to fit any neck. The required materials have been readily available.

The materials required for the split-felt plaster collar are:

Half-inch orthopedic felt easily obtained in rolls of 18 by 36 inches.

Prepared plaster splints 4 inches wide and 15 inches long.

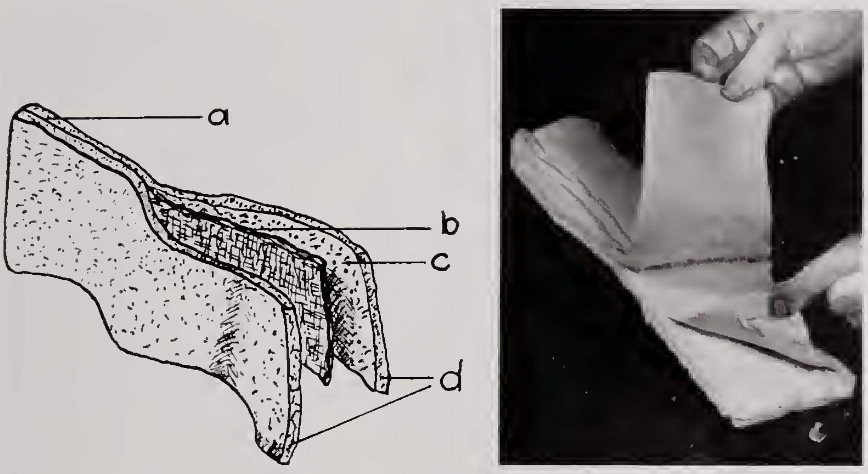


FIG. 2. Assembly of split-felt plaster collar. The ½-inch orthopedic felt pattern (a) has been split, thus "sandwiching" the smaller wet plaster splints to afford a margin of felt for protection of the skin.

Orthopedic stockinet (tubular) 3 inches wide and 25 yards long.

Bandage scissors.

Ordinary wash basin containing warm water.

Measuring tape.

The following is the method of application:

The circumference of the neck is measured to determine the length of the half-inch orthopedic felt pattern. The width of the felt pattern is determined by placing the head of the patient in the desired position and measuring the distance from the center of the chin to a point one inch below the sternoclavicular articulation. The half-inch orthopedic felt is cut with bandage scissors to the required length and width. A concave recess to fit beneath the lower jaw is made along the superior border and midportion of the felt pattern. Concave recesses are cut out along the inferior border and laterally to fit the contour of the shoulders. The felt pattern is fashioned to hug each mastoid process and to fit snugly under the occipital ridge (figure 1). There should be about one-fourth inch interval posteriorly in the midnuchal line between the ends of the felt pattern when it is fitted around the neck.

The thickness of the half-inch orthopedic felt pattern is split so that each component is one-fourth inch thick. On the split surface of one of these components eight to ten wet plaster splints are applied which extend only to about a half inch of the borders of the felt. The other felt component is replaced thus enclosing the wet plaster splints in between (figure 2). Since the edges of these wet plaster splints extend only to about a half inch to the borders of the felt, the soft tissues are adequately protected from the hardened plaster. The three-inch stockinet is cut to a length two and a half times the length of the split-felt plaster pattern and is slipped over it, leaving ends of equal length on each side (figure 3). The ensemble is applied about the

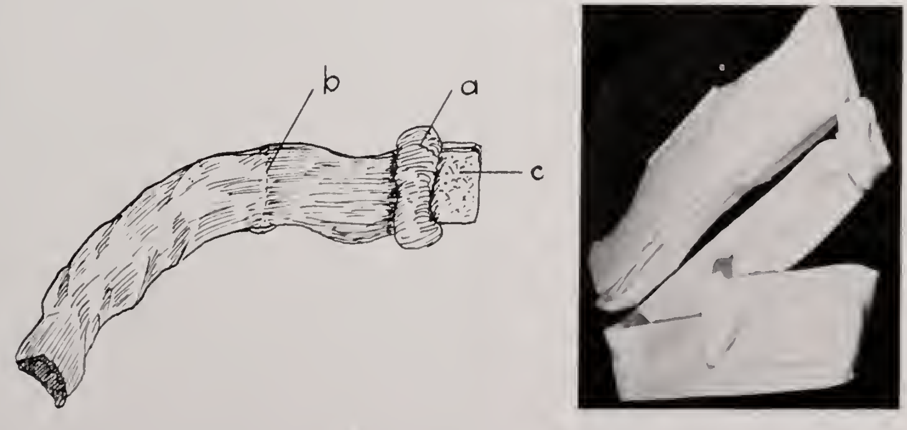


FIG. 3. Stockinet (a), which is 2½ times the length of the felt pattern (c), is rolled over it.

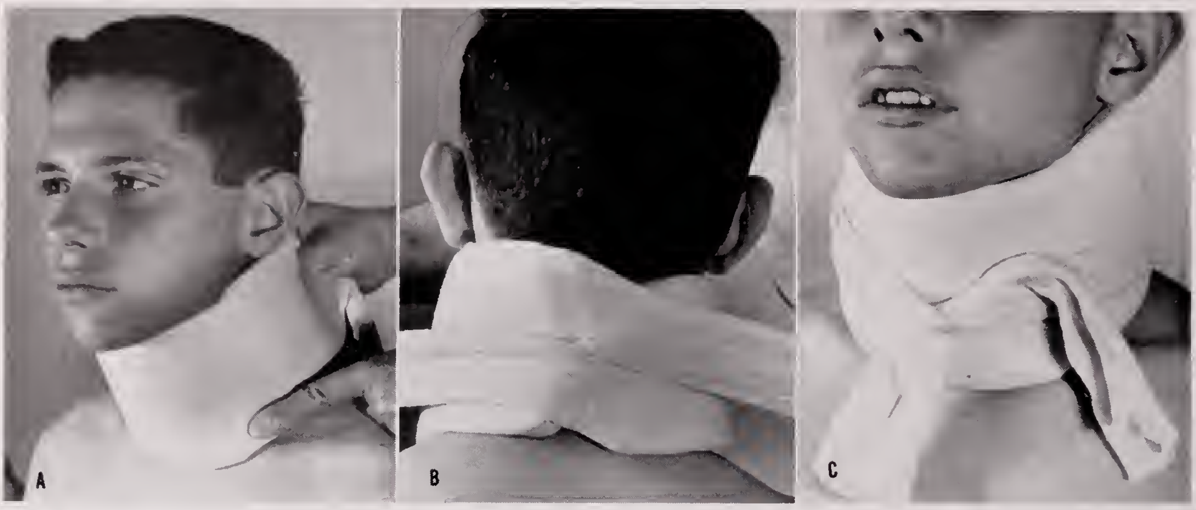


FIG. 4. A-collar applied about the neck; B-ends of stockinet crossed posteriorly; C-stockinet tied in a square knot anteriorly.

neck snugly and molded into position (figure 4-A). The ends of the stockinet are crossed posteriorly (figure 4-B) and are tied in a square knot anteriorly where they are easily accessible (figure 4-C). The split-felt plaster stockinet ensemble has now become the split-felt plaster collar which has been carefully molded under the mastoid process, over the clavicles, onto the sternum, and under the mandible. The plaster quickly dries in this position.

The advantages of the split-felt plaster collar are:

It is easy to apply. After a little experience the physician can apply it within eight to ten minutes.

It is comfortable. The plaster edges are well protected by the felt. The stockinet absorbs perspiration and can be removed, washed, and reapplied as often as desirable.

The collar retains the body warmth, thus eliminating the necessity to apply external heat to the neck.

It can be removed easily for sleeping and for toilet purposes. Since the stockinet is tied anteriorly the patient can remove and replace the collar without assistance.

Each collar can be fitted to the contour of any neck with the head in any desired position.

It is inexpensive, and the materials are universally available.

It is not exceptionally conspicuous.

The indications for the split-felt plaster collar are:

It can be applied as a first-aid measure to a patient with suspected cervical spinal injury to afford support and adequate immobilization during transportation.

It is of value in patients suffering with arthritic conditions of the cervical spine to effect partial immobilization of the facets.

It is useful in patients suffering with cervical radiculitis, either traumatic or toxic.

It helps patients suffering with the cervical root syndrome.

It can be used to treat patients suffering with cervical sprains and ligamentous strains.

The collar has been used to assist to sustain the weight of the head of patients who have suffered with a muscular imbalance of the neck as produced by poliomyelitis or other diseases.

It has been valuable to patients who were suffering with brachial and cervical plexus neuropathies, cervical degenerative intervertebral discs, muscle injuries to the neck, vertebral artery syndrome, and with so-called occipital neuralgia.

(*Continued on page 497*)

Hepatic Function of Diabetic Patients on Chlorpropamide*

ADOLPH FRIEDMAN, M.D.

Diabetic Outpatient Clinic, Washington Hospital Center, Washington

THE QUESTION OF HEPATOTOXICITY from chlorpropamide has been the subject of considerable controversy, much of it acrid, both in and out of medical circles. Many clinicians who have diligently followed large groups of patients with liver function tests have found no consistent evidence of abnormal liver function.[1-7] These and other authors are convinced that chlorpropamide possesses a reasonable degree of safety and that it might be preferred to other oral hypoglycemic agents because of its undoubted effectiveness and longer duration of action.[8] Nonetheless, several cases of obstructive jaundice have been reported. Icterus is frequently preceded by alteration of one or more tests of liver function—serum alkaline phosphatase, bromsulfalein, bilirubin and transaminase, perhaps most characteristically by a serial and progressive increase of the alkaline phosphatase.[9-12] Lee et al[13] observed a transitory rise of alkaline phosphatase in three patients without the development of jaundice, and Brown[14] reported one case with elevation of alkaline phosphatase without jaundice. It is also of interest that Baird[15] observed a case of clinical jaundice attributable to tolbutamide, in which the bromsulfalein retention was 50 per cent at 30 minutes, but the serum alkaline phosphatase was normal. In another interesting case Heinsen[3] substituted chlorpropamide for insulin in a patient with severe jaundice as the result of hepatitis. The patient made an uneventful recovery.

There is now general agreement that the jaundice is a manifestation of hypersensitivity because (1) it tends to occur within a rather circumscribed time period following the initiation of therapy, e.g., six weeks,[14] (2) it is always of the cholestatic type, (3) it is often preceded by or associated with skin reactions and a rise in the eosinophil count,[16-19] and (4) it can occur on relatively low as well as high dosage.[11, 12, 14, 17] In one reported case,[20] after jaundice had subsided, a challenging dose of chlorpropamide elicited a skin reaction for the second time. The jaundice, which in itself is an ominous sign, may not be serious and has only rarely evolved into a more significant reaction. Although Dobson et al[17] lost a patient because she failed to report to the clinic when she became ill, a similar case, which might also have proved fatal, responded to the use of prednisone.[11]

There can be no doubt that patients taking chlorpropamide must be watched carefully throughout with reference to diabetic control, and particularly in the early weeks of treatment for signs of impending hypersensitivity.

It is evident that cholestatic jaundice reasonably ascribable to patient hypersensitivity to a number of useful therapeutic agents is becoming an increasing problem. It is also evident that this type of drug reaction is not, strictly speaking, evidence of hepatotoxicity.[19] Of possible greater significance, particularly as regards long-term therapy, is the determination of true toxic potential with reference in this instance to chlorpropamide. Accordingly this study of the hematologic status and hepatic function of pa-

---

* This study was made possible by a grant from Pfizer Laboratories, Division of Chas. Pfizer & Co., Inc., which also provided the chlorpropamide as Diabinese.

tient on long-term therapy with chlorpropamide, even in doses higher than those usually recommended, was undertaken.

METHODS

In May, 1958 the study of 23 maturity-onset type diabetics was undertaken.* The drug had to be discontinued in four of these patients within 11 days and in the fifth case at the end of one month because of complaints referable to hypoglycemia or gastrointestinal disturbances. The remaining 18 cases are the subject of this report. The age of onset of diabetes ranged from 36 to 59 years with an average of 48, and the age at the initiation of chlorpropamide treatment ranged from 39 to 68 years, averaging 51. Many of the patients were overweight, the maximum weight being 235½ pounds and the average 172 pounds. Nine had previously been treated with diet alone; three with tolbutamide, 1 to 3 Gm. daily; four had had NPH insulin®, 15 to 36 units per day; and two had had PZI®, 18 and 60 units. The average insulin requirement of these six patients was 30 units per day.

Inasmuch as the tablets of chlorpropamide initially supplied by the manufacturer were 0.5 Gm. each, all patients but one had a daily dose of at least 0.5 Gm. for one week at sometime during their therapy (table 1). In three patients the maximum daily dose at some time or other during the study was 0.75 Gm., in five patients 1.0 Gm., and in one patient 1.875 Gm.; the latter patient's maintenance dose has varied between 1.3 and 1.5 Gm. (This patient was begun on chlorpropamide on May 14, 1958.) The initial dose of chlorpropamide was from 0.25 Gm. to 1 Gm. daily, but usually 0.5 Gm. A diet of 1,000 to 1,500 calories was prescribed for most of the patients, but adherence to the diet could not be guaranteed. The duration of treatment was from a year and a half to more than two years, although a few patients did not have chlorpropamide continuously throughout the period of observation. Other medication, such as hematinics, antihypertensives, diuretics, and digitalis, was prescribed as indicated. Fasting blood sugars, two-hour postprandial blood sugars, and 24-hour urinary sugars were determined at almost every patient visit. Complete blood counts, blood urea nitrogen, serum bilirubin, bromsulfalein retention, and alkaline phosphatase and thymol turbidity determinations were performed at frequent intervals, and the serum transaminase (SGOT) occasionally.

TABLE 1

Dosage and Duration of Use of Chlorpropamide in Eighteen Patients

Patient	Initial Dose (Gm.)	Highest Dose (Gm.)	Most Recent Dose (Gm.)	Duration of Treatment*
B. B.	1.00	1.00	None	8/6/58–10/8/58
	0.150	0.150	None	11/5/59–5/11/60
H. C.	0.5	0.5	None	9/11/58–6/18/59
C. F.	0.75	0.75	0.25	6/24/58–1/4/61
M. F.	0.5	0.5	0.075	9/24/58–12/28/60
W. G.	0.5	1.875	1.375	5/14/58–12/22/60
G. H.	0.75	1.00	0.85	10/20/58–1/4/61
A. J.	0.5	0.5	0.25	9/24/58–3/-/60†
M. L.	1.00	1.00	0.30	8/6/58–1/4/61
H. L.	0.5	0.5	0.20	5/8/58–1/4/61
H. M.	0.25	0.25	None	1/29/59–5/5/59
W. M.	0.50	0.75	0.20	8/28/58–1/4/61
G. M.	0.75	0.75	0.20	8/20/58–12/22/60
Y. M.	1.00	1.00	0.25	9/18/58–1/4/61
V. M.	1.00	1.00	0.35	7/30/58–1/4/61
E. R.	0.50	0.50	0.25	10/8/58–1/5/61
M. S.	0.50	0.50	0.40	10/9/58–12/29/60
M. T.	0.50	0.50	0.30	10/2/58–1/13/61
E. W.	0.50	0.50	0.150	6/12/58–12/28/60

* Even though the main portion of the study was terminated months before, it was possible to bring the data on dosage to a more current date.

† Patient died in another hospital of carcinoma of the uterus.

RESULTS

Fasting blood sugar values fell from an average of 184 to an average of 108 mg. per 100 ml. (initial range 137 to 240, final range 98 to 124).

---

* The people used in this study were patients of the Diabetic Outpatient Clinic at the Washington Hospital Center.

There was a comparable decrease in two-hour postprandial blood sugar levels. At the start of chlorpropamide treatment eight of the 18 patients had 24-hour urinary glucose of 11 to 50 Gm. The remaining patients had from zero to 7 Gm. per 24-hour urine, most of them being sugar-free. This fell to zero in seven cases and varied between zero and 9 Gm. in the eighth. One obese patient (described in the first case history below) excreted no urinary sugar on 60 units of protamine zinc insulin; while taking large doses of chlorpropamide he had levels varying between zero and 29 Gm. per 24 hours. The glycosuria was manifested when an attempt was made to reduce the dose of chlorpropamide from 1.5 Gm. to 1.3 Gm. daily. The fasting blood sugar of this patient at the onset and on 60 units of PZI® per day was 0.2 Gm., and at the end of the study 0.104 Gm.

Three patients were brought under sufficiently good control to be taken off chlorpropamide. One was begun on 1 Gm. daily, which was gradually reduced and discontinued entirely at the end of two months. For the next year she was maintained fairly well on diet alone but then because of rising blood sugar levels chlorpropamide, 0.15 Gm. daily, was again administered. The renewed medication had the desired hypoglycemic effect. One of the remaining patients, whose initial dose was 0.5 Gm., was maintained on diet alone after nine months of therapy, and the other, whose initial dose was 0.25 Gm., after only three and one-half months of therapy.

Variations in weight were not consistent. Eight patients gained an average of 10 pounds, and ten lost about the same amount. With the exception of the overweight patients already mentioned the greatest losses were in those who weighed the most.

In no case was there a significant or persistent change in the peripheral blood picture. Changes in blood urea nitrogen were not uniform or significant, but the level tended to decrease in most cases. The only level that was abnormally high (27 mg. per 100 ml.) was not lowered; this patient eventually died of generalized metastatic carcinoma. Bromsulfalein retention, which was initially above normal in 7 cases, dropped to a normal range during the treatment period. There was no significant change except in one patient in whom a transient increase from 4.25 to 7.25 per cent retention was observed while on a daily dosage of 1.875 Gm. of chlorpropamide. This was not associated with other changes of the liver function tests employed. Thymol turbidity was initially normal in all cases and remained so. In one case, however, it rose to 4.85 units but not until several months after chlorpropamide was discontinued. The drug had been withdrawn because its hypoglycemic effect was no longer required, and the patient was able to be controlled by diet alone. In a second case it rose to 4.85 units on 1 Gm. dosage but fell again when the dose was reduced to 350 mg. per day; the final reading of 0.1 unit was lower than it had been initially. Bilirubin and alkaline phosphatase readings were invariably within normal limits. The transaminase test (SGOT), performed in only half the cases, always gave normal results.

ILLUSTRATIVE CASES

Case 1. A Negro aged 68 who had been a diabetic for 18 months was reasonably well controlled with 60 units of PZI® per day. The blood pressure was 160/90, and the weight ranged from 205 to 210 pounds. The patient had a moderately enlarged prostate and generalized arteriosclerosis. Small exudates were seen in each retina. The heart was enlarged, especially in the region of the left ventricle, and the electrocardiogram indicated anterior-wall ischemia. Physical examination was otherwise unremarkable. Insulin was reduced to 30 units and chlorpropamide begun in dosage of 0.5 Gm. Since there was no apparent change in the patient's condition a week later, insulin was discontinued and chlorpropamide increased to 0.75 Gm. Gradually the daily dose of chlorpropamide had to be increased to 1.875 Gm. to maintain the blood sugar at a near normal level. When the patient subsequently developed manifestations of hypoglycemia the dose of chlorpropamide was slowly reduced; as previously mentioned, when the dose was at 1.30 Gm. daily glycosuria occurred, so the dose was raised to 1.5 Gm. daily, his present maintenance dose.

Throughout the period of study there was no notable change in the patient's general condition. Despite the dosage levels necessary to effect control of the diabetes, liver and kidney function tests were normal at all times, with the exception of the transient and nonprogressive increase of bromsulfalein retention (mentioned previously) at the time of the highest dose, and of doubtful significance.

Case 2. A Negro of 38 had been diabetic for two years. Except for obesity his physical examination was relatively normal. He was able to reduce his weight from 235 to 190 pounds by dieting. Maintained on tolbutamide, 3 Gm. daily, his fasting blood sugar* ranged from 173 to 183 mg., and the 24-hour urinary glucose was 12.6 Gm. Chlorpropamide, 0.75 Gm., was substituted for tolbutamide and continued for over 21 months. When hyperglycemia was observed the dose was increased to 1.0 Gm. per day but gradually leveled off at 0.85 Gm. daily. On the latter dose fasting blood sugars ranged from 80 to 123 mg. Despite occasional low blood-sugar levels. the patient never suffered from overt hypoglycemic episodes.

Renal and liver function studies and peripheral blood counts were always within normal limits. Once again, persistent high dosage was not associated with demonstrable functional abnormalities of the systems tested.

Case 3. A woman of 51 had no remarkable abnormalities except obesity and diabetes of two years' duration. On a 1,500 calorie diet and 2 Gm. of tolbutamide daily her fasting blood sugar was in the neighborhood of 130 mg. per 100 ml. but rose to 380 mg. when she discontinued her diet and medication. It was lowered to the range of 137 to 168 mg. per 100 ml. when she was put on 15 units NPH insulin® per day; it tended toward the lower level when the caloric intake was reduced to 1,200 calories. During this time the fasting blood sugar varied between 104 and 110 mg. Chlorpropamide was substituted for insulin and continued for 23 months. This patient has required the lowest maintenance dose of the series, being managed by 75 mg. of chlorpropamide daily. During the course of treatment blood urea nitrogen fell from 13.5 mg. per 100 ml. to 9 mg., bromsulfalein retention from 17.75 per cent to 4.5 per cent, and alkaline phosphatase from 2.36 to 1.65 units. The bilirubin level and thymol turbidity were normal and virtually unvarying throughout.

Table 2 compares the most recently available laboratory data with pretreatment values in these three patients.

TABLE 2

Laboratory Data in the Three Illustrative Cases

Patient	Date Chlorpropamide Started	Date Last Seen	Blood Counts*	B.U.N.		B.S.P.		Thymol Turbidity		Alkaline Phosphatase		Total Bilirubin	
				Initial	Last	Initial	Last	Initial	Last	Initial	Last	Initial	Last
W. G., 68, male	5/14/58	12/22/60	Normal†	10.5	9.0	4.2	5.00	0.50	0.75	1.6	1.3	3.50	.75
G. H., 38, male	10/30/58	1/4/61	Normal†	12.5	15.0	3.0	2.5	0.30	0.50	1.9	1.4	.40	.10
M. F., 51, female	9/24/58	12/28/60	Normal†	13.5	9.0	17.75	4.5	1.0	1.0	2.36	1.65	0.21	0.21

* Both complete blood counts and white blood cell and differential counts were done, but the white blood cell and differential counts were done most often.

† Compared with pretreatment values, which were also normal.

Discussion

There is no question of drawing any far-reaching conclusion from so small a series of cases, but the fact that no measurable signs of toxicity arose from protracted administration of doses several times larger than the upper limit recommended by the manufacturer suggests that chlorpropamide is not directly hepatotoxic and tends to substantiate the hyperergic etiology of observed instances of jaundice. Indices of liver function generally improved during treatment. The only indications of altered liver function were a minor increase of thymol turbidity on dosage of 400 mg. daily and a transient increase in bromsulfalein retention on a dosage of

---

* Somogyi method.

1.875 Gm., subsiding when the dosage was reduced. This is reminiscent of the early cases of jaundice reported by Hamff et al,[18] in which the disturbance of liver function was seemingly related to the amount of drug ingested. However, since this patient was already on such a high dose and the extent of reduction of the dosage was actually not significant in terms of the recommended dose, it is quite possible that the reactions would have disappeared spontaneously without manipulation of dosage, as occurred in the abnormal tests reported by Lee et al.[13] It is most probable that disturbance of liver function is a matter of sensitivity and is similar to that recognized in association with many other drugs. In the present series there happened to be no patient hypersensitive to the chlorpropamide, and long-term therapy even with high daily dosage levels produced no evidence of serious hepatic dysfunction. Chlorpropamide therapy would have been terminated at once had any evidence of hypersensitivity, such as skin rash, eosinophilia or other persistent alteration of the peripheral blood picture, or progressive abnormality of liver function developed.

Steigmann[19] has pointed out that a considerable number of recently introduced therapeutic agents have at least the potential for producing jaundice and/or hepatic damage and has grouped those drugs, according to the pathologic reactions produced, into three categories: (1) hepatotoxic group, (2) cholestatic-cholangiolytic group, and (3) mixed group. Chlorpropamide, a member of the second group, produces occasional cases of jaundice suggestive of biliary obstruction functionally and histologically. A generally similar type of jaundice has been reported in association with tolbutamide therapy.[15] Thus, chlorpropamide is not hepatotoxic in the sense that it does not characteristically produce hepatocellular damage and as in this study doses considerably in excess of those usually recommended do not produce persistently and/or uniformly measurable alteration of hepatic function. It can nonetheless occasionally produce jaundice.

This does not suggest that the drug, which is undoubtedly highly effective, be used with reluctance. It does, however, dictate that during the initial few weeks of therapy, when evidence of hypersensitivity might develop, the physician maintain an appropriate index of suspicion regarding pruritus, skin rash, changes in the color of stools or urine, and unexplained low-grade fever or malaise. Certainly, such manifestations, particularly when accompanied by eosinophilia or progressive elevation of the serum alkaline phosphatase, might well be regarded as significant premonitory signs and symptoms useful in forestalling or mitigating overt jaundice, thereby facilitating the safe use of the drug.

It was to be expected that there would be great individual variation in the size of the effective dose, which is presumably proportionate to the amount of insulin that would be required. The limits in this series were rather extreme, however, ranging from 0.075 to about 1.5 Gm. daily. A number of the authors quoted have found it useful to maintain some of their patients on 1 Gm. per day, but others, Murray,[7] for example, consider it imprudent to exceed 0.5 Gm. Although there is no dose-disease relationship as concerns jaundice, it is obviously advisable to keep the dose as low as is consistent with effectiveness.

SUMMARY

Eighteen diabetic patients with disease of the maturity-onset type were treated with chlorpropamide in dosage of 0.075 to 1.875 Gm. daily for periods up to more than two years. Clinical results were uniformly excellent, and laboratory studies revealed no significant indications of toxicity to the liver, kidneys, or blood-forming organs. From these findings and from a brief review of the relevant literature, it is concluded that chlorpropamide is a useful drug in the treatment of diabetes mellitus and that the

(Continued on page 497)

Coexistent Unilateral Krukenberg Tumor and Pseudomucinous Cystadenocarcinoma of the Ovary*

N. A. JANOVSKI, M.D.
Pathologist, Sloane Hospital for Women, New York City

A PRIMARY CARCINOMA OF THE STOMACH in a female metastasizes in 55 to 70 per cent of cases to the ovary.[1, 2, 3] This particular form of metastatic gastric carcinoma of the ovaries is known as Krukenberg tumor.[1, 4, 5] Subsequently, this term was extended to include metastases to the ovaries from the small and large intestines and/or the gallbladder.[1, 3] It represents 7 per cent of all malignant tumors of the ovaries[3] and appears bilateral in 90 per cent of the cases. It is usually solid, multilobular, well-encapsulated, and is characterized histologically by the presence of fibrosarcomatous stroma and scattered mucin-producing neoplastic epithelial elements. The simultaneous occurrence of metastasis in a preëxisting ovarian tumor is reported very infrequently. Flanagan[6] reported a Krukenberg tumor occurring in ovarian cystadenoma associated with the Brenner tumor. I recently had the opportunity of examining a unilateral ovarian tumor which histologically represented an interesting diagnostic problem, particularly in view of the histologic resemblance of a mucin-producing adenocarcinoma of the gastrointestinal tract to that of an ovarian pseudomucinous cystadenocarcinoma.

Report of Case

The patient (Unit No. 1517292, Path. No. 61-840) was a 48-year-old Negress, gravida X, Para IV, abortions 6, whose last menstrual period occurred in April, 1959. She was admitted to the Sloane Hospital for Women on March 11, 1961 complaining of vague pain in the lower abdomen, backache, weight loss of 15 pounds, and a recent episode of vaginal spotting. These symptoms had developed gradually within the last two months.

In June, 1957 the patient underwent a subtotal gastric resection and gastrojejunostomy. The pathologic examination of the resected stomach disclosed a rather poorly differentiated, highly anaplastic adenocarcinoma of the stomach. The perigastric lymph nodes contained metastatic tumor. The liver and other abdominal organs, including the female internal genitalia, were not thought to be involved by the tumor at the time of operation. In April, 1960 she had irregular vaginal bleeding for one month, for which she underwent curettage at another hospital.

On admission the patient was found to be a well nourished, well developed female with normal temperature, heart rate, and blood pressure. The lungs and heart were not remarkable. The liver was not enlarged. A pelvic mass was palpated, rising to two fingerbreadths below the umbilicus. On pelvic examination a multinodular tumor, well delineated from the uterine fundus, was palpated. This tumor completely occupied the cul-de-sac. The impression was that of an ovarian tumor, most probably, in view of the previous history, of metastatic origin. Sigmoidoscopic examination revealed evidence of a tumor pressing on the sigmoid portion of the colon but without fixation to the rectosigmoid. X-ray examinations of the lungs and gastrointestinal tract were negative for evidence of metastases. An intravenous pyelogram revealed a moderate right hydronephrosis due to partial obstruction of the right ureter. All other laboratory examinations were within normal limits.

---

* From the Departments of Pathology, and Obstetrics and Gynecology of the College of Physicians and Surgeons, Columbia University, and from the Obstetrical and Gynecological Division of the Presbyterian Hospital (Sloane Hospital for Women), Columbia-Presbyterian Medical Center, 622 West 168th Street, New York 32, N. Y.

The patient underwent exploratory laparotomy on March 20, 1961, at which time a multilobular, yellowish, firm, well-encapsulated, mobile tumor, measuring 15 by 9 by 7 cm. was found replacing the right ovary. The left ovary was of normal size and configuration. The uterus, both tubes, and other abdominal organs appeared normal. A total abdominal hysterectomy and bilateral salpingo-oöphorectomy were carried out.

The patient tolerated the operative procedure well. The postoperative course was characterized by a relatively rapid recovery. She has been followed in the Tumor Clinic to date with no evidence of recurrence.

On macroscopic examination the right ovary was found to be greatly enlarged and greatly convoluted, having a shiny and smooth external surface. It weighed 285 Gm. and measured 15 by 9 by 7 cm. On cut section the surface was seen to be yellow. The tumor was solid and firm, having occasional, scattered cystic structures measuring up to 1 cm. in diameter. The left ovary measured 3 by 3 by 2 cm., weighed 10 Gm., and showed very fine convolutions. Upon bisection the ovary was found to be yellow and uniformly solid. Both tubes were grossly normal. The uterus and cervix weighed 70 Gm. and appeared grossly atrophic (figure 1).

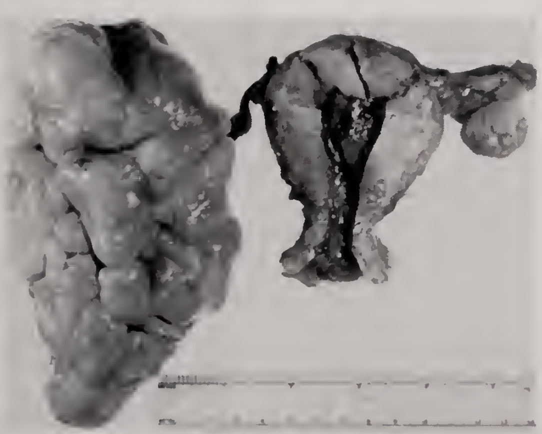


FIG. 1. Right ovarian tumor with gyrate appearance of left ovary and relatively atrophic uterus and endometrium.

On microscopic examination the endometrial curettings, obtained at the time of operation, revealed a rather dense cytogenic stroma and occasional endometrial glands lined by cuboidal to tall-columnar epithelium. There was no evidence of mitotic activity. Sections from the cervix, uterus, and tubes were interpreted as showing senile involutional changes.

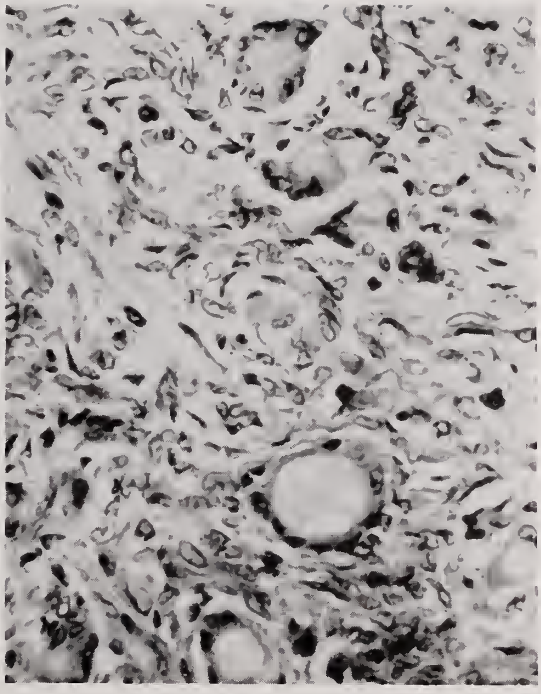


FIG. 2. Fibrothecomatous proliferation of functional sudanophilic ovarian stroma. Intermingled are signet-ring cells and mucin-producing abortive acinar structures.

Sections from the right ovary showed a proliferated fibrosarcomatous stroma in which were embedded and scattered throughout neoplastic epithelial cells or groups of various sized cells forming abortive minute acini. Some of the neoplastic cells showed a characteristic "signet ring" appearance (figure 2). In some areas the connective tissue cells resembled proliferated theca cells. The neoplastic cells were forming abortive glandular structures, having in places a rosette formation. Sharply separated from the solid areas of the metastatic tumor were multiple cysts (figure 3). These were lined, in a majority of instances, by a single row of tall-columnar epithelium with basally placed nuclei (figure 4). The epithelium was that of a benign cystadenoma. However, some of the cystic structures showed transitional changes of the lining epithelium into a malignant type of epithelium characterized by stratification of nuclei and the presence of mitotic figures. The connective tissue stroma between the cystic structures was heavily infiltrated with single or grouped neoplastic cells (figure 5).

Periodic acid Schiff reaction revealed innumerable individual neoplastic cells and groups of cells containing PAS-positive material. The cysts were also found to be mucin-producing, although the cells were uniformly filled in the apical portion with mucin. Alcian blue stain was

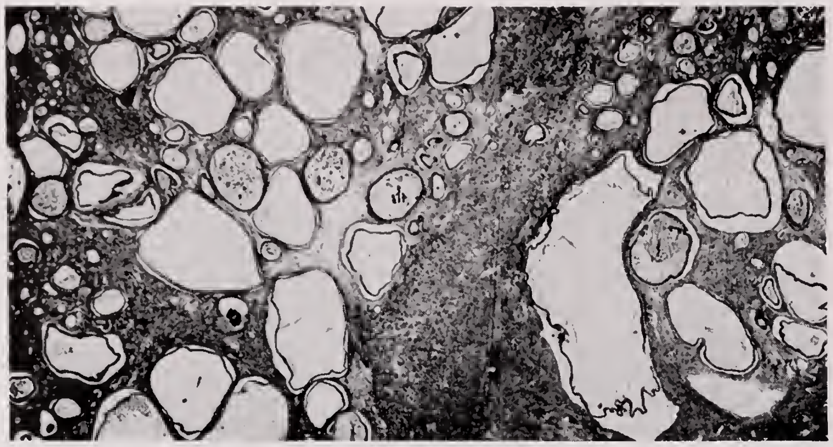


FIG. 3. Multicystic structures encountered in right ovarian tumor.

moderately positive in the neoplastic epithelial cells and in the neoplastic cystic structures. Masson's trichrome stain disclosed a great and diffuse increase of collagenous connective tissue. The reticulum stain correlated with Masson's stain.

Oil Red O stain demonstrated sudanophilic material localized in the proliferated connective tissue theca cells. The epithelial tumor cells and the cells of the cystic structures were free of sudanophilic granules.

The left ovary presented a marked degree of proliferation of cortical stromal cells. The proliferated cells formed nodular structures and extended diffusely into the medulla. A moderate degree of hyalinization was observed. No sudanophilic material was detected. There was no evidence of malignancy.

The diagnosis was Krukenberg tumor, associated with primary ovarian pseudomucinous cystadenocarcinoma and stromal luteinization, right ovary; cortical stromal hyperplasia, diffuse, left ovary; and subatrophy, endometrium.

DISCUSSION

The occurrence of two tumors in the ovary is apparently an unusual combination of ovarian neoplasms. It is quite possible that the metastasis from the gastric carcinoma occurred in an already altered ovary, i.e., an ovary in this case presenting pseudomucinous cystadenoma or cystadenocarcinoma. The two entities, namely, the Krukenberg tumor and the primary ovarian carcinoma, are well differentiated morphologically in this case. However, the speculation arises as to the common origin of the two neoplasms. Certainly, when a carcinoma of the rectosigmoid metastasizes to the ovary it has a superficial resemblance to a primary carcinoma of the ovary.

There are examples of a metastatic tumor to the ovary from the stomach in which the structure is cystic rather than of the solid fibroepithelial form of the typical Krukenberg.[2] The question arises, is it not possible that the metastases from the stomach took the form of a solid tumor of a typical Krukenberg type on one side and of a mucus-producing cystadenocarcinoma on the other? The demonstration of the benign-appearing, tall-columnar epithelial lining of the cysts and the transition of the same epithelium into carcinoma (figure 4) solve this question.

There are no statistical data available as to

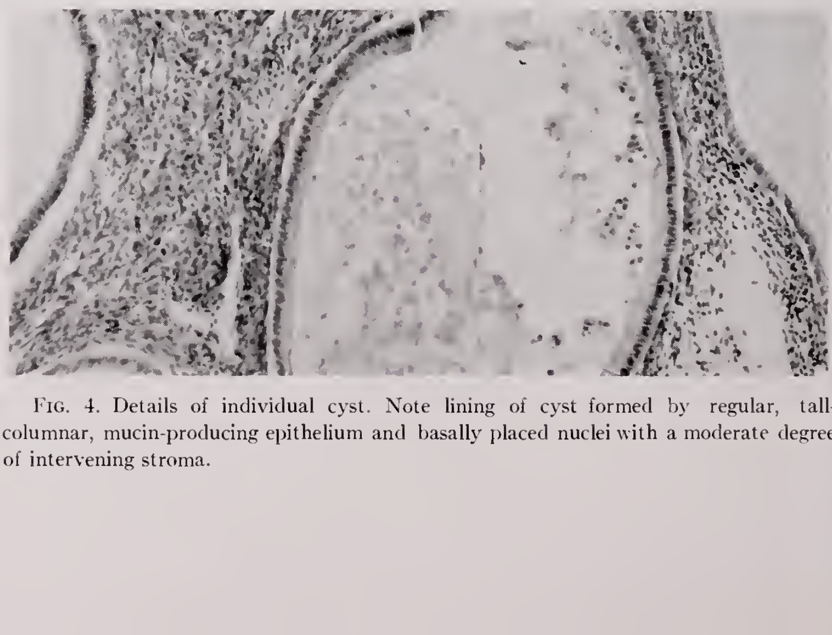


FIG. 4. Details of individual cyst. Note lining of cyst formed by regular, tall-columnar, mucin-producing epithelium and basally placed nuclei with a moderate degree of intervening stroma.

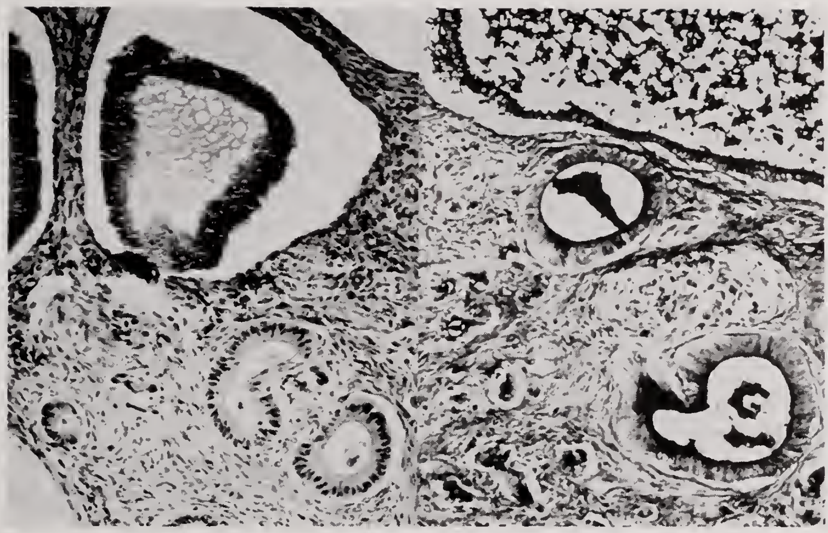


FIG. 5. Malignant changes occurring in cystic structures, characterized by stratification of nuclei and multiplication of cells. The intervening stroma is characterized by the presence of highly atypical neoplastic glandular structures.

the incidence of the Krukenberg tumor in a previously neoplastically altered ovary.

Of some interest is the fact that a considerable amount of sudanophilic material was detected in the fibromatous - appearing stroma of the ovary. It is apparent that the stroma of the ovary in question has undergone a considerable degree of luteinization. Similar observations of luteinization of ovarian stroma associated with the Krukenberg tumor were made by Mosinger et al[7] and Scully et al.[8] This is, most probably, a thecomatous reaction of the ovarian stroma toward the metastatic neoplastic cells; it is a rather nonspecific response, since it has been observed in different types of metastatic tumors of the ovary.[7]

One may wonder, is there any pathogenic correlation between these two neoplasms, the Krukenberg tumor and pseudomucinous cystadenocarcinoma? Recently the concept of the primary nature of the Krukenberg tumor has been brought into consideration by Woodruff and Novak,[9] Numers,[10] and Musante et al.[2] However, in the case presented it is only logical to accept as a fact that the Krukenberg tumor occurred as a result of a metastatic process from a primary, poorly differentiated adenocarcinoma of the stomach. The cystadenoma or cystadenocarcinoma may have been occult or dormant prior to the metastatic process. The neoplastic and anaplastic properties of the primary ovarian tumor may have been stimulated and/or potentiated by the metastatic tumor. This, however, is purely hypothetical. Histochemically, the tumors behaved similarly, and there was no particular distinction between them by the application of periodic acid Schiff reaction or alcian blue stain.

The left ovary was larger than one would expect in a postmenopausal woman and presented a classical picture of diffuse cortical stromal hyperplasia. Whether the cortical hyperplasia in any way protected the left ovary against the gastric metastasis or did the preexisting neoplastic changes in the right ovary predispose toward the occurrence of the Krukenberg tumor in the right ovary, remains a question. The cortical stromal hyperplasia is found in a high percentage of patients with carcinomas of the endometrium and breast.[8, 11] No reference is made as to the occurrence of contralateral cortical stromal hyperplasia associated with the primary or secondary carcinoma of the ovary. Although there was no evidence of endometrial hyperplasia in this case, the endometrium exhibited rather subatrophic changes suggestive of some weak hormonal stimulation.

SUMMARY

A case of Krukenberg tumor coexistent with pseudomucinous cystadenocarcinoma has been presented. It is considered to be a coincidental finding. The diagnostic difficulty in differentiat-

(Continued on page 497)

Maternal Mortality: District of Columbia, 1950-1959*

C. K. FRASER, M.D., F.A.C.S.

Chairman, Obstetric Board of the Medical Society of the District of Columbia; Associate Clinical Professor of Obstetrics and Gynecology, George Washington University School of Medicine

THE CONVICTION has been established that the Obstetric Board, subjecting each maternal death to intensive study, yields information which tends to improve not only our management of the obstetric patient but laterally the need to improve the maternity services available to her.

The reduction of mortality and morbidity in all branches of medical practice has been shown to be increasingly in the field of preventive medicine. Obstetric practice, certainly, is no exception to this general rule.

HISTORY AND METHOD

The confidential inquiry on individual maternal death originated in 1937 with the formation of the Obstetric Board by The Medical Society of the District of Columbia with the coöperation of the Department of Public Health. This continuing study, interrupted by World War II, was reactivated in 1950. The method of study, case-finding, the cross-matching of birth and death certificates, collecting and compiling the data, review by the Board, and its assessment of avoidable factors are recorded elsewhere.

Terminology, definitions, classification, causes of maternal death—direct, indirect, nonrelated—conform to "A Guide for Maternal Death Studies, Committee on Maternal and Child Care, Council on Medical Series, American Medical Association, 1957."

The Sixth Revision of the International Lists of Diseases and Causes of Death was used for coding the maternal deaths that occurred during 1950–1957, the Seventh Revision for 1958–1959 deaths.

In 1954 I presented to the Washington Gynecological Society the report of the Obstetric Board for the period 1950–1954. The present report records the account of the investigation continued over the period 1955–1959. The comparative data will permit an appreciation of differences in the findings of the two periods.

Tabulations in this report for the District of Columbia are by place of occurrence and include both resident and nonresident deaths in order to provide a more valid basis for analysis.

MATERNAL MORTALITY BY COLOR—UNITED STATES, 1959 AND SELECTED YEARS

Table 1 is not only instructional but contains valuable historical viewpoints. There are separate but related events which undoubtedly contributed to the production of progressively smaller percentages of fatal outcome.

The White House Conference on prenatal and maternal care was published in 1933.[1] In the same year the New York Academy of Medicine[2] published a 1930–32 survey of New York City deaths, a survey which dealt with methods of study, causes, affecting factors and preventability of maternal deaths, antepartum and intrapartum care, hospital and midwife practice and recommendations.

---

* Presented by invitation before a meeting of the Washington Gynecological Society in Washington, D. C., February 28, 1962.

During the same period Dr. P. F. Williams[3] in Philadelphia inaugurated his program wherein a searching analysis was made of the causes of all maternal deaths in that area, especially from the viewpoint of prevention.

TABLE 1

Maternal Mortality by Color: United States, 1959 and Selected Years*

Year	Maternal Deaths†		Number of Registered Live Births
	Number	Rate per 10,000 Live Births	
Total			
1959	1,588	3.7	4,244,796
1949	3,216	9.0	3,559,529
1939	9,151	40.4	2,265,588
1929	15,084	69.5	2,169,920
White			
1959	927	2.6	3,597,430
1949	2,099	6.8	3,083,721
1939	6,995	35.3	1,982,671
1929	12,140	63.1	1,924,475
Nonwhite			
1959	661	10.2	647,366
1949	1,117	23.5	475,808
1939	2,156	76.2	282,917
1929	2,944	119.9	245,445

* U. S. expanding birth registration area included all states in 1933 and subsequently. Alaska is included as a state in 1959.

† Includes deaths due to complications of pregnancy, childbirth, and the puerperium, according to the International Lists of Diseases and Causes of Death; Seventh Revision, 1955, for 1959 data (W.H.O. 1957); the Sixth Revision, 1948, for 1949 data (W.H.O. 1948); Fourth Revision, 1939, for 1939 data (U. S. Bureau of the Census, 1940); and the Third Revision, 1920, for data of 1929 (U. S. Bureau of the Census, 1924). In general, adjustments have not been made to the rates to take account of changes resulting from various Revisions of the Lists and classification procedures between 1920–1955. It is estimated that rates specified for 1949 and 1959 would be about 10 per cent greater had the procedures of the Fourth Revision, 1939, been used to classify deaths of these years.

Source of data: National Vital Statistics Division of Children's Bureau, United States Department of Health, Education, and Welfare, prepared under the direction of E. P. Hunt, Ph.D.

From these three related activities has grown our present concept of a maternal mortality committee.

An event relating to the production of progressively smaller percentages of fatal outcome was contained in the emergency maternity and infant care program initiated by the Children's Bureau, U. S. Department of Labor, 1943–1948.

Table 1 shows maternal mortality and number of live births by color, in years a decade apart. The information for white and nonwhite mothers is shown separately.

Maternal Deaths by Year of Occurrence, Residence and Race

The total of maternal deaths for the period 1950–1954 is closely comparable to that of 1955–1959 (table 2) with the exception of a slight increase in the nonwhite group in the latter period. The deaths for both white and nonwhite during 1950–1959 totaled 209.

TABLE 2

Maternal Deaths by Year of Occurrence, Residence and Race: District of Columbia, 1950–1959

	All Years			1950–1954			1955–1959		
	Total	White	Nonwhite	Total	White	Nonwhite	Total	White	Nonwhite
TOTAL	209	76	133	103	38	65	106	38	68
Resident	152	34	118	73	17	56	79	17	62
Nonresident	57	42	15	30	21	9	27	21	6

Primary Causes of Maternal Deaths

The principal causes of maternal death in the specified periods (table 3) have undergone some changes in their relative importance, but the numbers are too small for actuarial significance.

The primary causes of maternal deaths, 1950–1954, in order of rank, are hemorrhage, infection, toxemia, vascular accidents and vascular diseases, and pulmonary tract disease. In the order of rank, 1955–1959, they are hemorrhage, infec-

TABLE 3

Primary Causes of Maternal Death by Specified Periods: District of Columbia, 1950–1959

CAUSE OF DEATH	1950–1959			1950–1954			1955–1959		
	Number	Rank	Per Cent	Number	Rank	Per Cent	Number	Rank	Per Cent
TOTAL	209	—	100.0	103	—	100.0	106	—	100.0
Hemorrhage	48	1	23.0	25	1	24.3	23	1	21.7
Infection	38	2	18.2	17	2	16.5	21	2	19.8
Toxemia	18	3	8.6	11	3	10.7	7	4	6.6
Vascular accidents	15	4	7.2	7	4	6.8	8	3	7.5
Vascular diseases	15	4	7.2	7	4	6.8	8	3	7.5
Pulmonary tract disease	12	5	5.7	5	5	4.8	7	4	6.6
Cardiac disease	11	—	5.3	4	—	3.9	7	4	6.6
Anesthesia	8	—	3.8	3	—	2.9	5	5	4.7
All other causes	41	—	19.6	22	—	21.4	19	—	17.9
Cardiac failure	9			7			2		
Malignancy	5			4			1		
Leukemia	5			1			4		
Urinary disease	4			1			3		
Appendicitis	3			2			1		
Diabetes	2			—			2		
PP hemorrhagic diathesis	2			2			—		
Poliomyelitis	2			1			1		
Acute duodenal ulcer perforated	1			—			1		
Chickenpox	1			1			—		
Hepatic disease	1			—			1		
Murder	1			—			1		
Pancreatitis	2			1			1		
Pulmonary edema	1			1			—		
Sickle cell anemia	1			1			—		
Ulcerative colitis	1			—			1		
Cause undetermined	3	—	1.4	2	—	1.9	1	—	0.9

tion, vascular accidents and vascular diseases, toxemia, pulmonary tract disease and cardiac disease, and anesthesia.

The rank for the total period, 1950–1959, shows this order: hemorrhage, infection, toxemia, vascular accidents and vascular disease, and pulmonary tract disease.

The larger clinical groups will be presented in detail.

MATERNAL DEATHS DIRECTLY RELATED TO PREGNANCY

There is a fall in the number of deaths directly related to pregnancy in the 1955–1959 period (table 4). This reduction is noted in deaths due to hemorrhage and toxemia, but the increase in deaths due to infections and anesthesia over the 1950–1954 period should be noted. A total of 131 deaths are so classified.

MATERNAL DEATHS INDIRECTLY RELATED TO PREGNANCY

Table 5 shows the causes of maternal deaths indirectly related to pregnancy, 1950–1959. A total of 50 deaths is recorded.

In 1955–1959 there was a slight increase in total numbers due to cardiac, urinary tract, and pulmonary diseases.

MATERNAL DEATHS NOT RELATED TO PREGNANCY

In 1950–1959 there was a total of 24 maternal deaths due to nonobstetric causes (table 6).

TABLE 4

Maternal Deaths Directly Related to Pregnancy by Cause and Specified Periods: District of Columbia, 1950–1959

CAUSE OF DEATH (AMA Diagnostic Classification)	Total All Years		1950–1954		1955–1959	
	Number	Per Cent	Number	Per Cent	Number	Per Cent
TOTAL	131	100.0	69	100.0	62	100.0
A. Hemorrhage due to:	48	36.6	25	36.2	23	37.1
Ectopic pregnancy	14		9		5	
Abortion	9		2		7	
Rupture of uterus	6		1		5	
Premature separation of placenta	5		3		2	
Postpartum uterine atony	4		3		1	
Placenta previa	1		—		1	
Retained secundines	1		1		—	
Laceration of uterus	1		1		—	
Laceration of vagina	1		1		—	
Coagulation defect	1		—		1	
Incompatible blood transfusion	2		1		1	
Other hemorrhages	3		3		—	
B. Toxemia classified as:	18	13.7	11	15.9	7	11.3
Eclampsia	11		8		3	
Toxemia superimposed upon H.V.D.	4		2		2	
Unclassified toxemia	3		1		2	
C. Infection resulting from:	35	26.7	16	23.2	19	30.6
Abortion	27		15		12	
Puerperal reproductive tract	6		1		5	
Ectopic pregnancy	1		—		1	
Renal infection during pregnancy	1		—		1	
D. Vascular accidents	12	9.2	6	8.7	6	9.7
Amniotic fluid embolism	4		1		3	
Puerperal nonseptic embolism	3		—		3	
Air embolism	2		2		—	
Other vascular accidents	3		3		—	
E. Anesthesia	8	6.1	3	4.3	5	8.1
Delivery complicated (by adverse effects)	8		3		5	
F. Other causes	10	7.6	8	11.6	2	3.2
Cardiac failure	9		7		2	
Pulmonary edema	1		1		—	

This schedule of pregnancy and associated disease warrants our attention.

The special skills of our colleagues in other branches of medicine have added much and will continue to increase our knowledge of the interactions of pregnancy and associated disease. The application of a curative régime in sickle-cell anemia, Hodgkin's disease, malignant states, multiple myeloma, and leukemia is obvious for mother and baby. Bear witness now to the utilization of prophylactic measures against poliomyelitis.

The classification of maternal death is always difficult, since the mother may suffer from multiple conditions, e.g., accidental hemorrhage and toxemia. It is a matter of opinion as to which is the principal cause. In the clinical groups which follow the same case may be discussed in more than one place, for example, abortion and hemorrhage. The tabulation of the death to a single cause has been preserved.

TABLE 5

Maternal Deaths Indirectly Related to Pregnancy by Cause and Specified Periods: District of Columbia, 1950–1959

CAUSE OF DEATH (AMA Diagnostic Classification)	Total All Years		1950–1954		1955–1959	
	Number	Per Cent	Number	Per Cent	Number	Per Cent
TOTAL	50	100.0	24	100.0	26	100.0
A. Cardiac disease	10	20.0	4	16.7	6	23.1
Rheumatic heart disease	5		2		3	
Other heart disease	5		2		3	
B. Vascular disease	14	28.0	7	29.2	7	26.9
Vascular embolism and thrombosis	3		1		2	
Other vascular diseases						
Cerebral vascular hemorrhage	7		4		3	
Ruptured aneurysm	4		2		2	
C. Reproductive tract disease	—	—	—	—	—	—
D. Urinary tract disease	3	6.0	1	4.2	2	7.7
Pyelonephritis	1		—		1	
Other (polycystic kidney congenital)	2		1		1	
E. Hepatic disease	1	2.0	—	—	1	3.8
F. Pulmonary disease	7	14.0	1	4.2	6	23.1
Tuberculosis	4		1		3	
Other pulmonary						
Influenza	2		—		2	
Acute bronchitis	1		—		1	
G. Metabolic disease (diabetes mellitus)	2	4.0	—	—	2	7.7
H. Other	13	26.0	11	45.8	2	7.7
Appendicitis	3		2		1	
Peritonitis (nonpuerperal)	2		2		—	
PP hemorrhagic diathesis	2		2		—	
Cancer of cervix	1		1		—	
Cancer of breast with metastasis	1		1		—	
Sickle cell anemia	1		1		—	
Chickenpox	1		1		—	
Acute duodenal ulcer perforated	1		—		1	
Acute monocystic leukemia with PP collapse	1		1		—	

MATERNAL DEATHS DIRECTLY RELATED TO PREGNANCY BY CAUSE

Hemorrhage. During the years 1950–1954 there were 25 deaths ascribed to hemorrhage. In order of their frequency, ectopic pregnancy, premature separation of the placenta, postpartum uterine atony, and abortion are noted.

From 1955 to 1959 deaths totaled 23. Abortion, ectopic pregnancy and rupture of the uterus ranked highest. Deaths from all causes totaled 48.

We regard ectopic pregnancy as a surgical emergency. Delay in diagnosis and in a properly safeguarding operation contributes heavily to death. But is this a true maternal death? Is not ectopic pregnancy, in the main, outside the scope of the maternity service?

Factors in avoidability were largely errors in judgment in recognition of the condition, failure to adequately treat initial shock, and patient neglect to consult a physician at the onset of abnormal symptoms.

Accidental hemorrhage may arise as a complication of toxemia, and the patient may die from toxemia or from hemorrhage. Five patients died from hemorrhage due to premature separation of the placenta.

The avoidable factors include inadequate or no prenatal care—the failure of the patient to recognize the warning signal of genital bleeding or the physician's failure to demonstrate his awareness and to apply the principles of treatment of acute renal insufficiency and/or coagulation defect as the situation warranted.

Rupture of the uterus occurred on six occasions. They were associated with labor, intrauterine manipulation, and the questionable use of oxytocic drugs.

TABLE 6

Maternal Deaths Classified as due to Nonobstetric Causes by Specified Period: District of Columbia, 1950–1959

Nonobstetric Cause	Period in Which Death Occurred		
	1950–1959	1950–1954	1955–1959
Total All Nonobstetric Causes	24	8	16
Per cent of Total—All Causes	11.5	7.8	15.1
Leukemia	4	—	4
Brain hemorrhage	3	1	2
Malignancy	3	2	1
Pneumonia	3	2	1
Poliomyelitis	2	1	1
Tuberculosis	2	2	—
Cardiac disease	1	—	1
Murder	1	—	1
Pancreatitis	1	—	1
Ruptured aneurysm	1	—	1
Septicemia	1	—	1
Ulcerative colitis	1	—	1
Urinary tract	1	—	1

The avoidable factors are obstetric judgment and consultation or earlier consultation.

Postpartum uterine atony is noted in four patients.

Generally there is improvement in the management of the third and fourth stages of labor, but the lack of appreciation of the seriousness of the condition and a possible coagulation defect operating still remain the primary avoidable factors. Examination of the genital tract with adequate exposure is mandatory.

Infection. Puerperal sepsis in both series is largely due to abortions performed for nontherapeutic reasons. However, in two instances of therapeutic abortion, the death has been tabulated under the condition for which it was done.

The total of septic abortions is 27.

Infection resulting from the puerperal reproductive tract warrants attention. The total is six, but five patients appear in the 1955–1959 grouping.

Self-induced and therapeutic abortion falls within the province of the Board for analysis. The complexities surrounding illegal abortions are of such magnitude that data concerning them would be almost impossible to obtain and would probably be invalid. Abortions known to be nontherapeutic are said to be primarily a social problem and only secondarily of medical concern.

The additional factors of marital state, size of the patient's family, financial situation, education, and living conditions warrant closer scrutiny of this category. The Board regards these deaths as avoidable, with assessment to the patient and persons unknown. There is a strong probability that had the patient sought proper treatment she would have been brought through parturition safely.

But does this type of avoidability contribute to the improvement of maternity services? Should procured or nontherapeutic abortions be retained in this type of study?

Complications of shock, renal necrosis, and the passage of instruments are well documented.

In three patients the use of intravaginal potassium permanganate was associated with but not established as the cause of death. The Board's interest in the misuse of this drug may have been salutary. Schedules from the D. C. General Hospital, on this score, were filed with the Food and Drug Administration. These schedules attested to the incidence of the drug as an intended abortifacient in this area.

On August 23, 1960 the action, in part, of the

Food and Drug Administration is noted: "Potassium permanganate and potassium permanganate tablets intended for human use are drugs subject to section 503(b)(1) of the Federal Food, Drug, and Cosmetic Act and should be restricted to prescription sale. Such drugs will be regarded as misbranded if at any time prior to dispensing the label fails to bear the legend, 'caution.' Federal law prohibits dispensing without prescription."

In those patients in whom bacteremic shock supervened the Board endeavored to balance its views, and if good antenatal and obstetric care prevailed the death was regarded as non-avoidable.

Toxemia of pregnancy. The cases of toxemia of pregnancy and eclampsia show a slight decrease, 1950–1954, compared to 1955–1959, i.e., 11 to 7.

The avoidable factor is largely the absence of, or inadequate antenatal care. The patient's attitude is important, since many made no attempt to arrange for their care during pregnancy. True, they may have been prisoners of their own domestic circumstances.

The risk to the patient who fails to keep her follow-up appointments should be stressed. The availability of accessible clinics for the type of patient requiring public service is a continuous and growing need. The changing population in the District of Columbia has made this clear and evident.

Shortage of community hospital beds does not provide an avoidable factor in this series. The fact that patients are admitted for treatment and discharged undelivered, only to return in critical condition, seems unwarranted.

Vascular accidents. In 1950–1959 there were six sudden deaths, due in four patients to amniotic embolism and in two to air embolism.

In all cases of puerperal pulmonary embolism following thrombosis and resulting in death the embolism has been classified as an indirect cause in the AMA Diagnostic Classification.

The onset of amniotic embolism may occur at any time in labor. In not one patient was an avoidable factor present.

Two women died suddenly of air embolism. The cause in one was found at autopsy. She died following operation for abdominal pregnancy. Partial removal of the placenta was accomplished. There is no mechanism available to occlude the hypertrophied and open vessels of the placental site after placental separation.

In the second patient sudden death from air embolus was preceded by a method which involved the injection of some fluid under pressure. The death was adjudged preventable.

Anesthesia. Deaths due to the complications of anesthesia totaled eight. Five deaths occurred in the 1955–1959 period. Inhalation of stomach contents and spinal anesthesia were contributory in the majority of patient deaths.

An avoidable factor was present in six patients and variously assigned to the physician and the hospital. Many of these tragedies may have been avoided by an experienced anesthesiologist. A consultant anesthetist should be responsible for the instruction of his junior staff and be available for consultation in difficult cases.

Cardiac failure. There were seven deaths assigned to this cause in 1950–1954 and two in 1955–1959. This is an area of major obstetric complications resulting from the chain of events initiated by the complication or the intervention required.

Anesthesia played a significant role in three patients. Failure to progress in labor with vaginal operative intervention resulted in two deaths. Two patients are assigned to this cause following cesarean section. One patient died on the fifth postpartum day after a spontaneous delivery. One patient in this group with firm adherence to her religious faith—"the Lord giveth and the Lord taketh away"—refused operative intervention.

Seven deaths were assessed avoidable, and with one exception responsibility was assigned to the physician and hospital.

MATERNAL DEATHS INDIRECTLY RELATED TO PREGNANCY BY CAUSE

This is the category of disease associated with pregnancy which was obviously aggravated by the physiologic effects of the pregnancy and caused the death.

Cardiac, vascular, hepatic and pulmonary diseases will engage our attention.

Cardiac disease. In the two periods ten deaths occurred as the result of cardiac disease which was present as a complication of pregnancy. The nature of the cardiac lesion revealed five patients with rheumatic heart disease and five with other forms of heart disease.

Avoidability was assessed five times in this series, in two instances to the physician only and two to the patient only. In one instance the responsibility was shared by the physician and the patient.

Wisdom is required in managing this complication of pregnancy. The patient's attitude, medical consultation, the need for conscientious prenatal care, an efficient checkup for nonattenders at the clinic, and suitable arrangements for rest prior to confinement are all essential factors.

Vascular disease. In the two periods vascular embolism following thrombosis, cerebral vascular hemorrhage, and ruptured aneurysm share an even distribution.

Deaths due to thrombosis and pulmonary embolism may be due to lack of diagnostic skill and the application of anticoagulant therapy. However, the infection may be mild and not sufficient to produce obvious symptoms, yet it is of importance in the production of thrombosis and embolism. Avoidability was assessed to the physician in one instance.

There were seven patients with cerebral vascular hemorrhage. This complication is a common cause of death in severe toxemia. This type of patient must be closely studied for evidence of deep coma and neurologic signs of intracranial hemorrhage. The neurosurgical management of this condition, severe toxemia, differs sharply from that of subarachnoid hemorrhage, e.g., due to rupture of an intracranial aneurysm.

Faulty antenatal care was by far the most serious and most frequent avoidable factor.

Ruptured aneurysm. It is problematical whether to consider this condition one of pregnancy complicated by aneurysm or aneurysm complicated by pregnancy. I believe, more properly, that the primary condition is aneurysm, which was subsequently complicated by and in turn, to some extent, complicated the pregnancy.

Aneurysms of cerebral vessels, aorta, splenic artery, and renal artery are included in this study. The interest shown by neurologic surgeons to aneurysms giving rise to subarachnoid hemorrhage has improved the understanding and active management of this vexing condition.

It is appropriate to note that:

1. Intracranial vascular lesions give rise to subarachnoid hemorrhage.

2. Dissecting aortic aneurysm gives rise to hemopericardium or hemothorax.

3. Aneurysms of vessels of the abdominal cavity, i.e., splenic and renal arteries, give rise to intra-abdominal or retroperitoneal hemorrhage with great and unrelenting pain.

Pulmonary tract disease. In the period 1950–1954 the death of one patient was assigned to pulmonary disease, but in 1955–1959 six patients were tabulated under this cause of death.

Pulmonary tuberculosis was the cause of death in four patients. Pregnant women should be included in the anti-tuberculosis campaign and screened by radiographic methods. The benefits of early diagnosis and treatment are obvious.

Avoidability was assessed to the patient in only two cases.

Listed under other pulmonary diseases is influenza. An epidemic of Asian influenza spread across this country in 1957. Two deaths were recorded; both deaths occurred during labor or the immediate puerperium. In both instances the tissues were fully studied at the Armed Forces Institute of Pathology. The diagnosis was confirmed.

Other causes of death indirectly related to pregnancy include appendicitis, peritonitis (nonpuerperal), postpartum hemorrhagic diathesis, acute perforated duodenal ulcer, and acute monocytic leukemia with postpartum collapse.

Hepatic disease is noted in only one instance in the 1950–1959 study. May I stress that hepatic disease and pancreatitis, a nonrelated entity, have emerged with an increased rate in this continuing study subsequent to 1959.

The Method of Delivery by Place of Death, 1950–1959

From this area, one subject, cesarean section, has been chosen since it provides material of considerable clinical interest. These deaths are associated with but not necessarily due to cesarean section. The deaths are attributed to the condition for which the operation was undertaken.

The number of cesarean sections during this period was verified as 42.

The method of delivery by relationship of cause of death to pregnancy is noted as direct 24, indirect 11, nonrelated five, and relationship undetermined two. The breakdown by outcome of delivery is presented in this brief table:

Total live births	26
Postmortem	3
Triplets	2
Total stillbirths	15
Postmortem	6
Triplets	1
Outcome not reported	1

There were nine postmortem cesarean sections. There are medicolegal implications and physician obligations, but if the emergency permits, as in all surgery, one should obtain consent to operate.

There was only one death in the employment of cesarean section in the treatment of placenta previa.

Thoracotomy and Cardiac Massage

The obstetric criteria of cardiac arrest may best be defined as "the sudden cessation of cardiac activity, unexplained by or in the absence of gross hemorrhage, shock or asphyxia."[4] In these data there are five deaths bearing the autopsy diagnosis of aspiration atelectasis, amniotic embolism in two instances, bilateral massive collapse of the lungs, and cerebral

TABLE 7

Deliveries by Place of Occurrence and Race: District of Columbia, 1950–1959

Year	Live Births			Fetal Deaths*			Total Deliveries		
	Total	White	Nonwhite	Total	White	Nonwhite	Total	White	Nonwhite
1950	28,955	19,125	9,830	373	159	214	29,328	19,284	10,044
1951	30,882	20,336	10,546	386	162	224	31,268	20,498	10,770
1952	31,940	20,966	10,974	441	188	253	32,381	21,154	11,227
1953	31,810	20,426	11,384	405	163	242	32,215	20,589	11,626
1954	32,090	20,348	11,742	383	131	252	32,473	20,479	11,994
1955	32,530	20,255	12,275	586	292	294	33,116	20,547	12,569
1956	33,094	19,966	13,128	519	249	270	33,613	20,215	13,398
1957	33,726	20,175	13,551	551	270	281	34,277	20,445	13,832
1958	33,865	20,205	13,660	446	219	227	34,311	20,424	13,887
1959	33,377	19,346	14,031	536	251	285	33,913	19,597	14,316

* By place of residence for years 1950–1954.

TABLE 8

Postmortem Examinations Performed on Maternal Deaths: District of Columbia, 1950–1959

Autopsy	Year										Total	Per Cent of Total Patients	Per Cent of Total Reported
	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959			
Total	25	17	23	18	20	20	15	22	15	34	209	100.0	
Total reported	25	17	23	17	20	19	15	22	15	34	207	99.0	100.0
Yes	22	14	18	15	16	19	13	20	12	27	176	84.2	85.0
No	3	3	5	2	4	—	2	2	3	7	31	14.8	15.0
Unknown	—	—	—	1	—	1	—	—	—	—	2	1.0	

hemorrhage. Certainly these are not cases of cardiac arrest. In each instance reversal of the cessation of cardiac function by surgical cardiorespiratory resuscitation was unrewarding.

An awareness of the obstetric criteria of cardiac arrest and the clinical and prognostic evaluation of ventricular asystole and ventricular fibrillation should be the guide for the performance or contraindication to thoracotomy.

Deliveries by Place of Occurrence and Race, 1950–1959

In the period under review there occurred 326,895 total deliveries (table 7); 326,686 deliveries were without fatal issue to the mother.

It is appropriate to note, in this actuarial study, the changing pattern by race. The nonwhite deliveries by occurrence have expanded 42.7 per cent in this period.

Postmortem Examinations Performed in Cases of Maternal Deaths, 1950–1959

Postmortem examinations during this period of study totaled 176, or 84 per cent (table 8) of all maternal deaths, 1950–1959. The majority of the postmortem examinations performed included final autopsy reports, including microscopic findings. In the remainder the recorded causes of death were based upon gross autopsy findings.

The establishment of the true cause of death is a prerequisite to further study of the mortality. The disparity between the actual and the recorded causes of death may be due to information which is yielded through study by the Board, establishing the cause of death as other than that recorded on the death certificate.

Legitimacy as a Factor in Maternal Deaths

Since legitimacy of birth and the outcome of delivery in the two five-year periods are somewhat comparable only the totals for 1950–1959 (table 9) will be discussed. This table is presented in percentage distribution of outcome by total pregnancies and legitimacy classifications.

TABLE 9

Maternal Deaths Showing per cent Distribution of Outcome of Total Pregnancies by Legitimacy Classification: District of Columbia, 1950–1959

Legitimacy	Per Cent Distribution of Outcome				
	Live Births	Fetal Deaths	Abortions	Undelivered	Not Reported
Total	41.6	15.8	21.5	20.1	1.0
Legitimate	51.8	20.6	11.3	15.6	0.7
Illegitimate	27.3	9.1	43.2	20.4	—
Legitimacy not reported	8.3	—	41.7	45.8	4.2

Of the 209 maternal deaths, 141 were of married women, 44 were unmarried, and in 24 mothers legitimacy was not reported.

For the group of 141 married mothers there were 73 live births, 29 stillbirths, 16 abortions, 22 undelivered, and one not reported.

For the 44 unmarried mothers there were recorded 12 live births, four stillbirths, 19 abortions, and nine undelivered.

For the 24 mothers with legitimacy not reported, there were recorded two live births, ten abortions, 11 undelivered, and one not reported.

There are important factors contributing to illegitimacy which are beyond the scope of this report, but one might prudently mention that research in the social, psychologic and economic areas is warranted.

MATERNAL DEATHS BY PARITY, 1950–1959

In the two five-year periods, of the women who died from puerperal causes the number of pregnancies per woman presented small variation. The greatest hazard lies in the primigravida, secundigravida, and in the woman pregnant for the third time.

The composition of the ten-year period follows:

Gravida	No. Deaths All Causes
1	38
2	42
3	32
4	14
5	15
6	13
7	5
8	4
9	5
10	3
11 or more	6
No entry	32
TOTAL—all years	209

Although this schedule does not contain the gravida's age, in general, mortality statistics reveal that the lowest maternal death rate is for mothers in the age group 20–24 years. The second lowest is for mothers under 20. For older mothers the rate is successively higher in each age interval over 24. The hazards of childbirth to older women are reflected in the sharp increase in this rate with advancing age, especially above 35.

PREVENTABLE MATERNAL DEATHS BY RACE AND LAPSE OF TIME BETWEEN DELIVERY AND DEATHS, 1950–1959

Preventable maternal deaths totaled 106 (table 10). By race, there were 23 white and 83 nonwhite mothers.

TABLE 10

Preventable Maternal Deaths by Race and Lapse of Time between Delivery and Death: District of Columbia, 1950–1959

LAPSE OF TIME	Total		White		Nonwhite	
	Number	Per Cent	Number	Per Cent	Number	Per Cent
TOTAL	106	100.0	23	100.0	83	100.0
Under 1 day	21	19.8	7	30.4	14	16.9
1–7 days	18	17.0	4	17.4	14	16.9
8–60 days	7	6.6	3	13.0	4	4.8
Abortion	36	34.0	4	17.4	32	38.5
All other	24	22.6	5	21.7	19	22.9

The interval between termination of pregnancy and death ran proportionately higher in the nonwhite group.

The interval is not reported for 21 women who died undelivered in 36 abortions and in two others.

AVOIDABLE FACTORS IN THE WHOLE SERIES

Reports of 209 deaths ascribed to pregnancy and childbirth were assigned to this study for the years 1950–1959. Of the 209 deaths 106 had avoidable factors and are classified as preventable deaths (table 11).

In 1950–1954 there were 60 preventable deaths. During 1955–1959 there was a significant drop, the preventable deaths totaling 46.

The avoidable factors have been discussed in relation to the principal clinical groups presented. But for emphasis the causes of preventable deaths in the clinical groups in order of frequency were hemorrhage, infection, toxemia, anesthesia, and cardiac disease.

Deaths with preventable factors in the whole series have been assessed: to the physician 24, to the patient 52, to a combination of physician and hospital 12, to the physician and patient 11, and to all others 7.

Most of the avoidable factors were the responsibility of individuals, i.e., the physician and/or the patient, and only a small proportion were due to administrative failure of the hospital.

TABLE 11

Preventable Maternal Deaths by Race and Responsibility Assignment: District of Columbia, 1950–1959

Responsibility Assignment	Total		White		Nonwhite	
	Number	Per Cent	Number	Per Cent	Number	Per Cent
Preventable deaths	106	100.0	23	100.0	83	100.0
Physician only	24	22.6	7	30.4	17	20.5
Patient only	52	49.1	7	30.4	45	54.2
Physician and hospital	12	11.3	5	21.7	7	8.4
Physician and patient	11	10.4	2	8.7	9	10.8
All other	7	6.6	2	8.7	5	6.0

Since the prime purpose of this study is the improvement of both obstetric management and maternity services, should abortion be left out of the discussion?

Nontherapeutic abortion not only emerges here but also in the schedule on infection. Avoidability is assessed to the patient, and, if he could be found, to the person who performed the abortion.

RECOMMENDATIONS

1. The Obstetric Board should continue its function. Its purpose is the study of avoidability in maternal death, and when indicated from this study to point out where community maternity services might be improved.

2. The action of the Food and Drug Administration, August 23, 1960, restricting potassium permanganate and potassium permanganate tablets for human use to prescription sale during the activities of this present Board has been noted. But where continued misuse of the drug is recorded it should be reported to the Food and Drug Administration within the framework of its Adverse Drug Reaction Program to improve effective enforcement.

3. This Board, as it functions, is sheltered under a broad umbrella of anonymity. Should legislation for the protection, not only of maternal and perinatal study committees, but other medical-audit study committees be sought for the District of Columbia? Legislation of this type, it is hoped, would protect such committees from legal liability as they conduct their studies.

4. Thoughtful and constructive consideration should be extended to the thesis of whether procured nontherapeutic abortion and/or ectopic pregnancy should continue to lie within the scope of this type of study.

The study of these causes even when joined with preventability contributes little to the improvement of maternity services.

5. Less obvious, but contained in this report, are matters of fetal death and neonatal mortality.

True, the majority of maternal services conduct studies of perinatal mortality and morbidity, of high order, but their study results remain unilateral and singular only to that maternity service.

There is need to establish a *modus operandi* with the Department of Health for a common area of reporting where the study results may be effectively evaluated and properly utilized for improvement of community maternity services.

6. The chief causes of preventable deaths warrant repetition. The clinical groups rank in this order: hemorrhage, infection, toxemia, anesthesia, and cardiac disease. The Three Horsemen continue to ride, but in the last two ranks measures are available for their prevention, when they are preventable.

7. There are major social and economic variants contained in this report. These variants were introduced into the District of Columbia following World War II and the ensuing post-

war years. The significant data are clear. Program action has not kept pace with the need for services brought about by the changing population in the District of Columbia. There is a high proportion of those in need of public services.

The situation is now well recognized. Remedies are being sought by the Department of Health to implement maternity services.

ACKNOWLEDGMENTS: The members of the Obstetric Board are deeply indebted to its Associate Members for their untiring energies; to the many consultants who have contributed their special skills in advising the Board; and to all who have assisted in any way in the formation of this report.

A source of guidance in the preparation of this report was the Ministry of Health Reports 97 and 103: "Report on Confidential Enquiries into Maternal Deaths in England and Wales."

The Bureau of Maternal and Child Health and the Division of Biostatistics of the D. C. Department of Public Health are responsible for the statistical classification and summarization.

In addition to the Chairman the members of the Board are Dr. J. Bay Jacobs, Secretary, Drs. Robert H. Barter, Raymond T. Holden, Andrew A. Marchetti, Ella Oppenheimer, Alvin F. Robinson (Medico-Chirurgical Society of the District of Columbia), and Coleridge M. Gill (Howard University School of Medicine).

REFERENCES

1. White House Conference on Child Health and Protection: Fetal, Newborn, and Maternal Morbidity and Mortality. New York: Appleton-Century, 1933.
2. New York Academy of Medicine, Committee on Public Health Relations: Maternal mortality in New York City, a study of all puerperal deaths, 1930–1932. New York: Commonwealth Fund, 1933.
3. Maternal mortality in Philadelphia, 1931 to 1933. Report of the Committee on Maternal Welfare. Philip F. Williams, M.D., Chairman, Philadelphia County Medical Society, 1934.
4. CARTER, F. H., JR., WEICKGENANT, C., JR., MOSES, J. J., AND PRENTISS, R. J.: Cardiac arrest: Is surgical resuscitation always warranted? Trans. West. Sect. Amer. Urol. Ass., 1958, **25**, 163.

Discussion

BAYARD CARTER, M.D.

Professor and Chairman, Department of Obstetrics and Gynecology, Duke University School of Medicine

MY THANKS are expressed for your kindness in inviting me to this meeting and in permitting me to discuss Dr. Fraser's report, "Maternal Mortality: District of Columbia, 1950–1959."

The Obstetric Board, by confidential inquiry, has subjected each reported maternal death to intensive study. The inquiries have revealed so many features of maternal deaths that it is difficult to know which to discuss. All of these reports are significant. In this limited discussion no assumption should be made that those subjects which are not discussed, due to a limited time, are not regarded as significant. In fact, anything which contributes to our maternal mortality is significant. The complications which these patients experience are also important when discussions of perinatal mortality are made.

At the outset it should be stated that the Obstetric Board should continue its functions. Its Chairman and its members should be commended for this fine work.

From 1950 to 1958 the population of the District of Columbia showed a change of but 5,000. There was a decline of 20 per cent (137,000) in the white population and an increase of 48 per cent (142,000) in the nonwhite population. Thirty-three per cent of the population as a whole was not able to pay for hospital admissions. There was also an increase in illegitimate births (3,750), and 41 per cent of these pregnancies were featured by no prenatal care. In 1958 the District of Columbia General Hospital registered 6,000 live births. However, 47 per cent of these patients who were delivered had had no prenatal care. In 1950 white births totaled 11,261 and nonwhite births totaled 8,938. In 1959 white births totaled 6,549 and nonwhite births 13,770. Physicians interested in obstetrics and gynecology and specialists who give their full time to the specialty know that at least one-third of pregnant patients through indifference, ignorance, or other pressures do not seek prenatal care. These patients contribute the majority of the emergency admissions due to complications which our general hospitals and specialized services in hospitals have constantly to accept as critically ill or critically compromised patients.

Many of these patients are the ones we do not reach with our own "educational" programs for expectant motherhood. Many of the problems which prevent the use of existing facilities for medical care are educational and socioeconomic, and are in fact "community" as well as medical problems. It is perfectly just that we hope in time to reach these patients with our "educational" plans. In the immediate future, however, we must accept the fact that in these deaths we must, in addition to delineating the medical and administrative responsibilities, delineate responsibilities which at present are not in any manner under our control. Deaths from abortion and from ectopic pregnancies may serve as examples. Few of these patients are ever seen until their condition is critical. In short, at least a third of our patients do not and will not use existing medical facilities which could prevent many of these complications.

In the period 1950 to 1954 the leading causes of listed deaths were hemorrhage, infection, toxemia, vascular accidents and vascular disease, and pulmonary tract disease.

In the period 1955 to 1959 the leading causes of listed deaths were hemorrhage, infection, vascular accidents and disease, toxemia, pulmonary tract disease, cardiac disease, and anesthesia.

Few deaths could be attributed to administrative failures of the hospitals.

In 1950 to 1954, 25 deaths were due to ectopic pregnancy, premature separation of the placenta, postpartum hemorrhage, and abortion. In 1955 to 1959, 23 deaths were due to these causes. The deaths from septic abortions were listed at 27. This is a high figure. In 1955 to 1959 anesthesia was responsible for 5 deaths. In the same period of time there were four deaths due to amniotic fluid embolism, two deaths from air embolism, and two deaths from cardiac failure. In the last five years of the report toxemia deaths were limited to seven.

It should be noted that Dr. Fraser in this report has sounded the warning that all of us should be ever alert for evidences of hepatic disease and of pancreatitis.

In our state of North Carolina the statistics for causes of death in the period 1955 to 1959 might be of interest for comparison and might cause speculation and thought. In this time the causes of death were hemorrhage 166, toxemia 163, embolism 39, infection 39, cardiac disease 18, anesthesia 15, other obstetric causes 103, nonobstetric causes 126, and incomplete 60.

One feature of our maternal deaths in North Carolina which has troubled us, as we look back as well as to the future, is the number of deaths due to acute renal failure following these obstetric complications.

In the time 1946 through 1956 there was a total of 1,065,019 births. In this group there were 1,620 maternal deaths. Maternal deaths from acute renal failure totaled 94 (5.8 per cent). In the first five years deaths from acute renal failure totaled 37 (4.4 per cent); in the second five-year period the total was 57 (7.3 per cent).

The maternal complications which preceded the acute renal failure were toxemia 37, hemorrhage 32, infection 9, embolism 2, other obstetric causes 12, nonobstetric causes and unknown 2, and related or possible etiology and blood transfusion 12.

We therefore have to be able to get these patients with acute renal failure to those hospitals which are equipped to manage the problems which attend this type of disease.

(*Continued on page 498*)

The Psychiatric Department of D. C. General Hospital

A Survey of Patient Characteristics, Treatment and Disposition[*][†]

ALLEN RASKIN, Ph.D.

Assistant Professor of Psychiatry (Psychology), Georgetown University School of Medicine

PAUL D. SULLIVAN, M.D.

Clinical Instructor of Psychiatry, Georgetown University School of Medicine

The Psychiatric Department of the District of Columbia General Hospital is housed in a separate building and has a yearly admission rate of approximately 5,000 patients. The function of the Psychiatric Department is to provide for the care and treatment of any person within the city of Washington who is in need of psychiatric treatment. Financially and medically indigent residents of the District of Columbia are eligible. Nonresidents in need of emergency psychiatric treatment are also admitted. Admission may be as a voluntary patient or from the various welfare and legal organizations of the District of Columbia.

The purposes of the Psychiatric Department are to evaluate, diagnose and make a disposition of every patient referred or admitted to the service. The goal is to treat the patient and return him to the community when he is able, or in prolonged illness to see that he is properly transferred to a psychiatric hospital.

How do the major diagnostic disorders admitted to the Psychiatric Department differ in background characteristics, treatment, and disposition? Are there significant race or sex differences within each of the major diagnostic disorders? Do social class and social competence variables have a significant influence on length of stay, treatment, or disposition? To answer these and related questions an effort was made to collect background, diagnostic, treatment and disposition data on all patients admitted to the Department in July, 1961.

Method

Three hundred and seventy-eight patients were admitted to the Psychiatric Department in July, 1961, and survey data were collected on 364.[‡] For the most part the 14 patients not

---

[*] From the Research Department, Department of Psychiatry, District of Columbia General Hospital, Washington, D. C.

[†] This research was supported by funds made available by Research Grant MYP4663 of the Psychopharmacology Service Center, National Institutes of Health, Public Health Service, United States Department of Health, Education, and Welfare.

[‡] The summer months, June, July and August, are the peak months for patient admissions to the Psychiatric Department. Hence July, the month chosen to conduct the survey, is probably typical of patient admissions during this peak period. As part of a larger phenothiazine study, we conducted a survey of all schizophrenic patients admitted to the Psychiatric Department in July, August and September, 1961. We found no significant differences between the three-month sample of schizophrenic patients and the psychotic patient group in the July survey on variables such as patient age, sex, educational level, occupational level, source of referral to the Department, and final disposition. However, we have no data on differences in patient admissions during the summer as compared to other seasons of the year.

included in the survey were alcoholics who were admitted and discharged on the same weekend. Data for the survey form, the Patient Information Summary, were obtained from the patient's clinical folder, the unit psychiatrist, and a brief interview with the patient.

The Patient Information Summary contained 15 variables. These included the patient's age, sex, race, marital status, educational level, occupational level, percentage of time employed during the past 12 months and the past five years, number of prior admissions to a psychiatric hospital, psychiatric diagnosis at discharge, source of referral for admission, and final disposition. The Patient Information Summary also asked if the patient was a District of Columbia resident, if he received a tranquilizer, and if he was on a tranquilizer at the time of discharge.

To assess occupational level, the seven-point occupational level scale developed by Warner, Meeker and Eels[1] was compressed into a three-point scale. Educational and occupational levels were the indexes of social class. The social competence variables were marital status and time employed in the preceding 12 months.

The Patient Information Summary also asked if the patient received individual and/or group psychotherapy. However, a rotation of psychiatric residents in July disrupted the Department's psychotherapy program. To compensate for this occurrence a limited survey of psychotherapy activity was conducted over a five-day interval in September, 1961. Each resident, medical officer and psychologist was asked to list the number of patients he was presently seeing for intensive individual psychotherapy, for supportive individual psychotherapy, and for group psychotherapy.

For the major statistical analyses patients were assigned to one of five diagnostic groups. Patients with a primary diagnosis of acute or chronic brain syndrome made up the organic brain damage group. However, if a patient was diagnosed as having an acute or chronic brain syndrome associated with alcoholism he was grouped with the alcoholics. The psychotic group was comprised of patients with diagnoses listed as psychotic disorders in the American Psychiatric Association Diagnostic and Statistical Manual of Mental Disorders. Drug addicts constituted the fourth group. The final group, the nonpsychotics, was comprised of patients with psychoneurotic disorders and disorders of character, behavior and intelligence. Chi-square and median tests were computed to test for significant between and within group differences.

DIFFERENCES BETWEEN THE FIVE DIAGNOSTIC GROUPS

There were 14 significant differences between the five diagnostic groups as compared to one expected by chance for the number of tests made. These differences are presented in table 1. The organically brain-damaged are the Department's geriatric patients with a median age of 67. There are significantly more Negro than white patients in the group, many are widowed, few received tranquilizers; they spent significantly more time in the Department than all groups with the exception of the psychotics, and the majority were transferred to a psychiatric hospital.

The drug addicts were the smallest group admitted to the Department. These patients had a median age of 38; there were significantly more white than Negro and male than female addicts, and 41 per cent were separated or divorced. Despite their drug problems, addicts had the best employment record during the past year. Approximately 70 per cent admitted themselves to the Department, and only 9 per cent were admitted by the police. This group also had the highest number of prior admissions to a psychiatric hospital, with a median of two prior admissions. Only 9 per cent received tranquilizers, and their stay in the hospital was relatively brief, averaging about six days. At discharge, 75 per cent of these patients went home to live alone, and 12 per cent were sent to a psychiatric hospital for long-term care and treatment.

Alcoholics were the largest diagnostic group, accounting for approximately 40 per cent of the July admissions. In many respects the alcoholics were similar to the drug addicts. There were significantly more white than Negro and male than female alcoholics; they had a median age of 42; 41 per cent were separated or divorced; and at discharge most went home to live alone. With the exception of the addicts they had the best employment record and the highest number of prior admissions to a psychiatric hospital. However, in contrast to the addicts, most

TABLE 1

Variables Which Significantly Differentiated the Five Diagnostic Groups

Variable	O[a]	D[b]	A[c]	N[d]	P[e]	χ^2
Number	29	22	146	73	94	141.56*
Male (%)	48	77	82	33	47	45.44*
White (%)	36	59	63	45	44	11.19†
Age (median)	67	38	42	28	37	31.93*
Marital status						51.08*
Single (%)	15	36	22	25	46	
Separated or divorced (%)	23	41	41	31	25	
Widowed (%)	42	0	8	6	1	
Married (%)	20	23	29	37	28	
Referral source						45.60*
Physician (%)	—	23	6	10	14	
Police (%)	—	9	27	50	48	
Self (%)	—	68	34	19	14	
Other (%)	—	0	33	21	24	
Time employed:						
Last 12 mos. (%)	15	42	38	23	21	32.33*
Last 5 years (%)	—	38	69	22	38	14.31*
No. of prior psychiatric admissions (median)	0.31	2.0	1.3	.35	.91	35.09*
D. C. resident (%)	86	86	93	75	69	26.38*
Received tranquilizers (%)	29	9	92	61	78	128.71*
On tranquilizers at discharge (%)	—	0	35	51	60	29.95*
Days in Department (median)	11	6	5	7	12	179.70*
Disposition						186.78*
Spouse, parents or relatives (%)	7	13	28	59	30	
Live alone (%)	4	75	57	16	11	
Psychiatric hospital (%)	78	12	4	6	49	
Other (%)	11	0	11	19	10	

[a] Organic brain damage.

[b] Drug addict.

[c] Alcoholic.

[d] Nonpsychotic.

[e] Psychotic.

χ^2 Chi-square.

* Significant at 0.01 level.

† Significant at 0.05 level.

alcoholics received tranquilizers and more were admitted by the police.

Although the nonpsychotics were the youngest group, with a median age of 28, they contained the largest percentage of married patients. Prior to their present admission few had been in a psychiatric hospital. Sixty-seven per cent of these patients were women. At discharge, the largest percentage of these patients went home to live with their spouses. On the average they spent seven days in the Department, and approximately half received a tranquilizer.

Psychotics comprised 26 per cent of the July admissions. Although their median age was 37, about half never married. With the exception of the brain-damaged patients, this group had the worst employment record for the preceding 12 months. However, it was somewhat surprising to find that their median number of prior admissions to a psychiatric hospital was just under one. About half of these patients were admitted by the police, and 30 per cent were nonresidents admitted on an emergency basis. Psychotics spent more time in the Department, with a median of 12 days, than any of the other diagnostic groups. Seventy-eight per cent received a tranquilizer, and 60 per cent were still on a tranquilizer at the time of their discharge. Approximately half were transferred to a psychiatric hospital.

RACE AND SEX DIFFERENCES IN THE ALCOHOLIC GROUP

There were six significant differences between Negro and white alcoholics. White alcoholics were significantly older ($p < .01$), were employed more often in the preceding 12 months ($p < .05$) and preceding five years ($p < .01$), and more were referred by the police or by Alcoholics Anonymous than the Negro alcoholics ($p < .01$).

Although significantly more male than female alcoholics were admitted to the Department ($p < .01$), there was only one additional sex difference; more males are single, separated or divorced and more females are married ($p < .05$).

RACE AND SEX DIFFERENCES IN THE NONPSYCHOTIC GROUP

There was a significant race difference in the diagnoses assigned the Negro and white nonpsychotic patients. More white patients were diagnosed reactive depression, and more Negroes were diagnosed as hysterical or conversion reaction ($p < .01$). The Negro and white nonpsychotics also differed on three background characteristics. Compared to the Negroes, the white nonpsychotics were better educated ($p < .01$), held higher occupation level jobs ($p < .01$), and were employed more often during the preceding year ($p < .05$).

More male nonpsychotics were diagnosed as sociopathic, inadequate or schizoid personality, whereas the diagnosis of hysterical or conversion reaction was reserved for women, and Negro women in particular ($p < .01$). There were three additional sex differences in the nonpsychotic group. Female nonpsychotics were more often self-referrals, and male nonpsychotics were more often referred by the police ($p < .01$). Compared to the men, the women in this group spent less time in the Department ($p < .01$), and at discharge more went home to live with a spouse or family member ($p < .01$).

RACE AND SEX DIFFERENCES IN THE PSYCHOTIC GROUP

Negro patients were more often diagnosed as catatonic schizophrenic than white patients. However, more white than Negro patients received a diagnosis of psychotic depression ($p < .05$). In addition, white psychotics had a better work record in the preceding 12 months ($p < .01$), worked at higher level jobs ($p < .01$), and were more often nonresidents than Negro patients ($p < .01$).

There was only one significant sex difference; more male psychotics were single, and more female psychotics were married, separated or divorced ($p < .01$).

THE INFLUENCE OF SOCIAL CLASS AND SOCIAL COMPETENCE

In general, the results of this investigation were disappointing. Marital status seemed to play a significant role in the treatment and disposition of nonpsychotic patients. In this group single patients remained in the Department longer ($p < .01$) and were also more often assigned to Occupational Therapy than separated, divorced or married patients ($p < .01$).

Within the psychotic group, marital status was significantly related to time in the Department; i.e., single patients stayed longer than married patients ($p < .05$). However, further investigation revealed that this relationship obtained only for those patients who were not transferred to a psychiatric hospital.

Since 48 per cent of the psychotic patients were transferred to a psychiatric hospital, an effort was made to identify variables related to this disposition. The number of prior psychiatric hospitalizations was the only variable that significantly predicted transfer to a psychiatric hospital. The greater the number of prior admissions to a psychiatric hospital, the greater the likelihood of transfer to this type of facility ($p < .01$).

PSYCHOTHERAPY ACTIVITY IN THE DEPARTMENT

In the five-day survey of psychotherapy activity carried out in September, 1961, the average daily census was approximately 200 patients. During this period 52 patients were receiving individual and 31 group psychotherapy. Individual psychotherapy was defined as regularly scheduled interviews of 30 minutes or longer that occur at least once a week. Hence, 41 per cent of the total hospital census was receiving some form of psychotherapy. Sex and race were not significantly related to assignment to individual psychotherapy. However, significantly more patients were being seen for individual psychotherapy characterized as supportive than for intensive therapy beyond the supportive level ($p < .01$). Finally, 18 of the 22 psychiatric residents, medical officers and psychologists in the Department reported some activity in psychotherapy. Five of the 18 reported seeing patients in group therapy, and 17 reported seeing patients in individual therapy.

DISCUSSION

The findings provide some insights into the operations of the Psychiatric Department. The Department appears to function primarily as a treatment center for patients in acute distress. Once admitted, patients undergo a fairly intensive course of treatment which includes psychotherapy as well as chemotherapy. However, this treatment is generally of short duration, since few patients remain for more than two weeks.

The median length of stay of 12 days for psychotic patients is probably related to the ten-day interval that elapses between the admitting physician's certification that a patient is of unsound mind and the subsequent hearing before the Mental Health Commission. If the Mental Health Commission rules that the patient is still of unsound mind, he is transferred to a psychiatric hospital.

The finding that the alcoholics and drug addicts had better work records than the other diagnostic groups, including the nonpsychotics, was unexpected. However, since there were many more white than Negro alcoholics and addicts, race rather than diagnosis would seem to be the crucial factor.

A staff member familiar with the Department's alcoholic patients was asked to explain the finding that significantly more white than Negro alcoholics were referred to the Department by Alcoholics Anonymous. This psychiatrist thinks that this fact reflects the difficulty Alcoholics Anonymous has had in organizing the District of Columbia's Negro alcoholics rather than a discriminatory policy of the organization.

The differences between the white and Negro patients admitted to the Psychiatric Department cut across diagnostic groups. White alcoholics, nonpsychotics and psychotics were employed at higher level jobs and had better work records than their Negro counterparts. Compared to the Negroes, the Department's white patients tended to be an older, more chronic group, whose marital ties had been severed and who were now living alone. Hence, in some respects the rehabilitation potential may be greater for the Negro than it is for the white patient.

In contrast to the consistent race differences, there were few sex differences in the alcoholic, nonpsychotic and psychotic groups. The only striking difference was the overwhelming number of male to female alcoholics.

Patients in the survey, white as well as Negro, represented a low educational and occupational level compared to the general population. This factor may account for the dearth of significant relationships between the social class and social competence variables and time in the hospital, treatment, and disposition. For these lower social class patients, marital status was the only variable significantly related to time in the Department. Of the group of psychotic and nonpsychotic patients not transferred to a psychiatric hospital, the married patients spent less time in the Department than the single.

Twenty-one per cent of patients in the July sample were transferred to St. Elizabeths Hospital. The percentage breakdown by diagnostic group was as follows: organic brain damage 72, drug addict 9, alcoholic 3, nonpsychotic 5, and psychotic 47.

Summary

Background, treatment, and disposition data were obtained on 364 of the 378 patients admitted to the Psychiatric Department of D. C. General Hospital in July, 1961. Patients were divided into five diagnostic groups: organic brain damage, drug addict, alcoholic, psychotic, and nonpsychotic. There were 14 significant differences between the five groups as compared to one expected by chance for the number of tests made. The distinctive characteristics of each diagnostic group have been reported. Race differences outweighed sex differences in the alcoholic, nonpsychotic and psychotic groups. For the most part, social class and social competence variables did not have a significant influence on time in the Department, treatment, and disposition. Finally, the data of a limited survey of psychotherapy activity in the Department have also been reported.

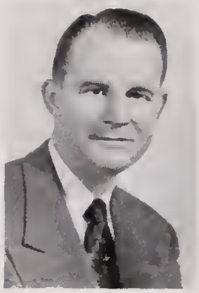
Acknowledgment: The authors wish to thank the following individuals for their assistance in collecting and analyzing the survey data: Joan Boruchow, Kevin Dwyer, Charles Ebert, Risa Golob, Siguard Moeller, and Ruth Pick.

REFERENCE

1. Warner, W. L., Meeker, M., and Eels, K.: Social Class in America. Chicago: Science Research Associates, 1949.

PRESIDENT'S PAGE

DEMOCRACY AT WORK

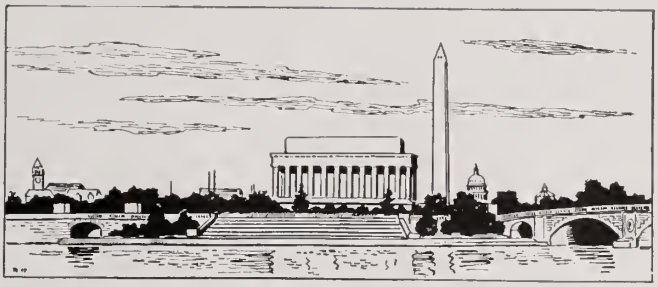


The American Medical Association's vigorous stand against compulsory, tax-supported medical care has brought forth two allegations by its opponents that will not stand up under careful scrutiny. First, it has been said that the American Medical Association does not speak for the majority of physicians in this country and that the average physician does not have the opportunity to express his views in the formation of national policy. Second, it has been said that physicians do not comprehend the true meaning and intent of the proposed legislation.

The fallacy of these two allegations soon becomes obvious to anyone who sits in on the AMA's Reference Committee hearings on all resolutions brought before the Association's House of Delegates. At the recent Chicago meeting I spent many hours with the Reference Committee which was holding hearings on the King-Anderson bill. I must say I came away greatly impressed by the truly democratic manner in which these hearings were conducted. Any member present, without previous arrangement, can take the floor to express his views openly either for himself or for any component organization he may represent. The Committee remains in session until all members who wish to do so have had their opportunity to speak for or against the resolution or report under discussion. For example, after several hours of hearing witnesses from all over the country speak with detailed knowledge against the King-Anderson bill, one member from New Jersey asked for and received the floor to speak in favor of this bill. Of the several hundred present no one rose to support his point of view; nonetheless, he was accorded the same courtesy and allotted the same amount of time as any other witness. This is indeed democracy at its best.

The Reference Committee hearings operate very much like Congressional committee hearings. The information gathered is assimilated and passed on in the form of a recommendation to the House of Delegates for final action. The road is open for any member of the AMA to have a voice in its national policy. State your views in the form of a resolution and have it adopted by your state society, which will instruct its delegates to introduce the resolution to the AMA House of Delegates or ask a delegate to introduce it as an individual. It will be referred to the proper Reference Committee for hearings, at which time you, your delegates, and as many others as you can induce will have an opportunity to speak in its behalf. If your resolution has merit you should have no trouble generating enough support for its adoption. Of one thing you can be sure: It will receive a fair hearing.

J Spencer Dryden



EDITORIALS

To All Members

"Hello" to all members of this Society from your new Executive Director. It is with a real sense of humility that I have accepted the task of following "Ted" Wiprud. Even a few weeks in the office make clear the high regard with which both he and the Society are held in this community. And, too, I have been most impressed with the dedication and hard work of the Committee Chairmen and members with whom I have had the opportunity to meet.

With so much to learn and so many new physicians to meet, I do hope each of you will feel free to come in and visit me. Your entire staff wishes to be of service in any way possible. No one can replace "Ted," but perhaps with your help we can do a reasonably good job of following his examples.

G. W. C.

Hospital Admission Fees

Judging from the numerous inquiries to this Society, it has become a custom for many practitioners in this community to charge a fee for admission of a patient to a hospital, regardless of whether the patient is seen or not on the day or night of admission.

We would agree with this charge, of course, if the patient is seen at the time of admission. However, it may, and in certain instances has already caused friction between patient and doctor. This is not to deny the right and justification for such a charge, if, as in so many cases, the admission of a patient entails numerous telephone calls, an admission note, and the writing of a history and physical where there is a shortage of house staff personnel. We all agree that this type of admission entails a considerable extra effort on the part of the admitting physician.

We feel that the term "admission fee" is a poor one. Appearing as an item on a statement sent to a patient, without explanation, it may readily invoke a feeling of resentment against the doctor. The patient's interpretation of such a charge varies greatly from that of the physician, since the former interprets it merely as a fee for a telephone call to the hospital for the purpose of reserving a bed.

It is imperative that, when such a charge is made, it be done for the above reasons only, and that it be thoroughly explained to the patient, preferably before admission.

Opinions expressed in contributions to the Editorial Section are those of the writers and do not necessarily reflect the views of the Medical Society of the District of Columbia

A much better solution to this problem, and one which would eliminate possible contention, would be to make this a part of the charge for the first hospital visit, so as to take into consideration this extra work. Such a charge could be more readily explained to, and more easily understood by the patient, inasmuch as many insurance carriers already have incorporated in their fee schedule a higher sum for the first visit.

It behooves all of us to do everything in our power to improve our relations with the public, and to remove all possible sources of irritation.

IRVING BURKA, M.D.
Chairman, Grievance Committee

Financing the Health Care of the Aged

In just 20 years the total health care bill for all the people has multiplied six times but has increased tenfold for those over 65. Even with adjustment for larger population, the health bill for the aged is now greater than it was for all of the people, including the aged, just 20 years ago. Furthermore, the number of units of health care used by the aged today is more than half as many as for all the people, including the aged, at the time of the Pearl Harbor attack; and so it seems definite that there is a problem, but it is essentially fiscal and not medical. The senior citizens presently are receiving good care, although paying for it is not always easy.

In connection with the general problem of distributing health care, the growth of voluntary health insurance is the most significant factor of the last generation. It has grown virtually from scratch to a six billion dollar a year business in only two decades. Blue Cross and Blue Shield particularly have shown a long-term concern for the aged through their policy of permitting all subscribers to retain coverage after passing the age of 65 and to retain it at the same rate as for younger individuals. By the time Mr. Forand achieved national prominence for his effort to obtain Federal legislation for the aged, the Blue Cross-Blue Shield segment of the voluntary system had come to cover four million of the aged and, through the support of younger subscribers and special contracts with the purveyors of services, to cover them at a yearly saving of 200 million dollars for just this group of the aged.

The very success of Blue Cross-Blue Shield in helping the aged included in an enrollment of one-fourth of the total population aggravated the problem for those not so covered, because when any special program for this high-risk group must stand on its own rate, the rate is so high as to be unacceptable for an adequate program. No amount of wishful thinking will do away with the hard fact that special programs for the aged must be inadequate or high priced, nor will pooling the offerings of groups of insurance companies lower the cost of nonprofit programs. Although notable advance in health insurance coverage has been made for the aged generally, the gap still left is much greater than for the younger population. The achievement of voluntary health insurance in expanding enrollment policies and benefit patterns has established the general conclusion, which in recent years has come to be shared by labor, that this system is a better alternative than compulsory Government health programs for the general population.

It has been repeatedly suggested by proponents of Forand or King-Anderson type programs that they would relieve Blue Cross and Blue Shield of the burden of the aged and so save these locally controlled voluntary nonprofit prepayment plans. However, this misconstrues the basic purpose of these plans. They should not be relieved of a burden so proper for a community service plan. One of my favorite pictures is that of a poorly dressed, teen-age boy, who, although carrying on his back a tired youngster half his size, looks up with a bright smile and says, "He ain't heavy, father; he's my brother." Our legislative statesmen should not permit, much less encourage, these health plans to escape such a burden lest the tragic result be the loss of their strength and the progressive transfer of all their obligations to the Government. To assist old people to remain with the rest of the population within the voluntary system, adjusted to their special needs, is far different from having the Government assume full responsibility for any segment of their care.

A health care program for the aged should have the following clear-cut attributes:

1. It should be essentially nonprofit.
2. It should deal in services rather than dollars.
3. It should use the voluntary prepayment system and thus enhance it for the 125 million other Americans who must depend upon it.
4. It should cover from one-half to two-thirds of the total bill, regardless of the extent to which public funds, Federal and local, are utilized to assist in the financing.
5. It should be under regulations to require high standards for all, under a uniform scope of benefits, and exclude inferior, partial programs even though already existent.
6. It should include a maximum of free choice of qualified program carriers.

It should be recognized that health insurance of itself does not create money but only organizes its distribution. Lowering the cost of a prepayment program does not reduce the total cost of health care, but instead increases the uncovered, uncontrolled portion so that at the time of sickness a patient actually has more expense. Therefore, the first step should be the establishment of a wide range of benefits, and then the cost should be estimated. Government funds might be contributed to each aged individual toward the purchase of this total program. If the Federal Government gave only a basic contribution, local funds at state level might augment the assistance according to need, but this test of need would be applied at the time of prepayment and not at the time of illness. Subsidy should not be given directly to a carrier.

Since health care of the aged constitutes 20 per cent of all health care in the United States, the issue before us involves the very life of voluntary health insurance for the other 80 per cent. To do this part well will, by example, cause a great upsurge in all the best parts of the voluntary system and a desirable reduction in the bad. Working under this general set of principles, it should be possible to devise a program for the aged which would give the most for each dollar of public money spent, which would protect and enhance the voluntary health insurance system, and finally which would bring all providers of health services and their chosen mechanisms of payment into a coherent program. There is no doubt that doctors and hospitals would support such a program and make it work.

Donald Stubbs, M.D.
Former Chairman of the Board,
National Association of Blue Shield Plans

Child Development Clinic and Assessment Service

Progress in medical research, fortunately, has been significant, and dramatic advances, particularly in preventive medicine, have resulted in changed patterns of disease. Nutritional, vaccinial and antibiotic research has been so successful in altering the composition of pediatric practice that more and more time and attention can be brought to bear on areas of interest never before practical. The special problems of the mentally retarded child is such an area which, until recently, was the special concern of just a few physicians. I submit that a problem of such magnitude that it involves ten per cent of all our children is now the major challenge to the discipline of the "new pediatrics." Those of us concerned with the responsibilities of pediatric medical education are cognizant of this challenge and are so adjusting the training experience in medical school and in residency programs. An increasing amount of the physician's time is spent in so-called "well baby care." The newborn, examined for congenital, anatomic or biologic anomalies, the emotional problems of family-child relationships, and frank personality variations may consume between 30 to 50 per cent of the practitioner's time.

The challenges presented by the retarded child to society are probably broader in scope than those presented by any other single individual, and these problems range from the neonatal period through the period of adolescence, and actually, of course, do not stop at this point. A major concern today is not with the one per cent of the population that is grossly retarded (which offers a special set of severe problems that requires further elucidation, thought and problems in management) but with the larger group of less severely involved children who frequently first come to notice belatedly as school failure problems.

The numerous responsibilities and demands on the time of practicing physicians often preclude the fullest evaluation of each child that is seen in the practitioner's office. The demands for service in reference to acute illness frequently inhibit complete evaluation of the psyche, special senses, coördination, and other important manifestations of normal growth and development.

I would like to see created a child development center and assessment service under University auspices that would be available to the general population of children to supplement the efforts of the private and clinic physician and provide him with an objective assessment of his patient with regard to a variety of psychologic, laboratory, physiologic, and metabolic functions. These various testing procedures would apply to the general population of children and not just to a specific group which gives overt manifestations of disease. Various tests determined by the chronologic age could be applied to an initial group between birth and one year, between the fourth and fifth years, between the eighth and twelfth years, and possibly in adolescence. This clinic could be largely manned by paramedical personnel, relieving the physician of some burdensome details. In this manner the earliest manifestations of an insidious disease process or situations which lead to loss of function in later life might be evaluated. I would recommend, in this phase of the clinic's activity, that all reports garnered by this technique be forwarded to the private physician for interpretation and treatment. Such a service conforms to the best traditions of preventive medicine and may bring to light at an earlier time medical conditions which otherwise become irrevocably established.

F. G. B.

Student Opinion

Efforts being made to show a division in the ranks of medicine on the Kennedy Aged Medicare proposal make a recent article in *Nation's Business* (June 1962) most refreshing reading.

Students surveyed in 17 public and private medical schools indicated great concern over Government interference in medical care because it would "drag down quality of treatment available to the public, impede medical research, reduce incentives for top performance by doctors and discourage bright young people from entering medicine."

According to the survey report:

> "Medical students overwhelmingly opposed proposals for providing medical care for older citizens under the Social Security system. The King-Anderson bill, now before Congress, would institute such a program. It has the support of the Kennedy Administration.

"Students, by a margin of more than five to one, say they would be less enthusiastic about entering the medical profession if health services were eventually nationalized as they are now in Great Britain.

"A majority of the students favor private rather than Federal funds for assistance in financing medical education. Half of those who say they would accept Federal help insist it would have to come without strings attached. Some of these say they fear Federal control or dictation would inevitably follow acceptance of money from Washington."

The 17 schools account for about 30 per cent of the total U.S. medical school enrollment. Their comments reflect a desire to maintain freedom in medical practice and very little enthusiasm for Government intervention through such legislation as the King-Anderson bill.

Directions for the Man Who Thinks a Peptic Ulcer Is a Status Symbol

1. Your job comes first. Forget everything else. Your family understands why you never have time for them and appreciates what you are doing.

2. Saturdays, Sundays and holidays are fine times to be working at the office. There will be nobody else there to bother you. Let the family go to the beach by themselves.

3. Always have your brief case with you when not at your desk. This provides an opportunity to review completely all the troubles and worries of the day, and also impresses people.

4. Never say "no" to any request that might even remotely assist your career.

5. Accept all invitations to meetings, banquets and committees. Take every opportunity to get on your feet and speak even if you don't know too much of the subject at hand. This draws attention to you.

6. All forms of recreation are a waste of time unless done with business associates or customers. The nineteenth hole is the best of all.

7. Never delegate responsibility to others. Carry the entire load yourself. "A penny saved is a penny earned." Watch every pencil and bottle of ink.

8. If your work calls for traveling, work all day and drive all night to keep the appointment you made for 8:00 the next morning. Have a supply of Benzedrine* always on hand to assure your being bright and fresh that morning.

9. No matter how many jobs you already are doing, you can always take on one more. Being secretary of your country club may bring in a few customers or clients. Be a "joiner" and always seek office.

10. Two or three quick, very dry martinis before supper is a fine way to work up an appetite. There is no need to sit down, relax and talk to the family for half an hour or so—you have nothing in common.

11. A quick drink or so just before a conference or "deal" makes your mind clear and alert.

12. Be sure and drink along with those you are dealing with at lunch or they will think you're a "square." Maybe one will get a little tight and sign a bigger order.

13. Crack the whip constantly on your subordinates to keep them alert and on their toes. They will admire you for it.

14. No one has any pride in his work any more. People you hire are just plain stupid. Make them do it the right way, which, of course, is your way.

15. Eat only when you're hungry. That's what wild animals do and they're mighty healthy. Plenty of beef steak, potatoes, gravy, pie and coffee is what an active, alert business man needs.

16. Doctors don't know anything. All they want is to make a "sissy" out of you. This cholesterol business is for the birds. You are as strong as an ox and those height-weight charts don't apply to you. Sweat a little of that "flab" off at a Turkish bath or health club steam room when you get a chance.

17. Take a "pep" pill or so during the day for extra energy and a good sedative before bed because you are all keyed up by the day's events.

No need to go further, for if you have followed these suggestions you already have your ulcer, and maybe high blood pressure and a "touch" of asthma as well.

WILLIAM T. GIBB, M.D.

DOCTOR:

Rectal cancer remains a major mortality problem in spite of the fact that over 75 per cent of these cancers originate in lesions that can be diagnosed and treated in the very early stages.

There is an excellent chance of diagnosing rectal tumors by digital examination alone. Sixty per cent of neoplasms of the rectum are within reach of the examining finger. Since the responsibility of early diagnosis rests mainly on the family physician, familiarity with the normal anatomic landmarks must be maintained by including rectal examinations in all routine physical surveys. This examination should then be followed by a proctosigmoidoscopy.

The symptoms of cancer of the terminal bowel may be similar to many other intestinal disorders; however, we should be particularly interested in discovering and correcting the disease before the symptoms appear. Too often the early symptoms are ignored. The most significant symptom is a history of changes in bowel habits.

Every doctor's office should be a cancer detection center, and proctosigmoidoscopy is an essential part of his examination. This should be accepted as a special duty of the first physician examining the patient.

A film, "Technique of Proctoscopy," is available for showing to physicians. A Proctology Teaching Program is now in process. Any physician interested in attending, CALL or WRITE:

RESEARCH
EDUCATION
SERVICE

**AMERICAN
CANCER SOCIETY**

**District of Columbia
Division, Inc.
810 18th Street, N.W.
Washington 6, D.C. ● EX 3-3690**

Annual Report on Administrative Services of Medical Service*

This report will cover three principal subjects: finances, enrollment and operations. Medical Service has made significant progress in all three of these areas in 1961.

Finances

During 1961 Medical Service paid out $17,193,000 to physicians for services rendered its subscribers, an amount which would provide each Participating Physician with a payment of more than $6,500. Also, during the year, Medical Service added $1,349,000 to reserves, to establish a total reserve of $4,269,438 or 2.82 months of claims and operating expense. The addition to reserves in 1961 is especially gratifying, in view of the fact that the Federal Employee Program, which constitutes nearly half of our enrollment, limits the amount that can be added to reserves to 1.5 per cent of the subscription income from that program. In addition to subscription income, we have received substantial income from investments made under the direction of the Finance Committee. For your information, I should like to take this opportunity to provide you with a comparison of the balance sheet of Medical Service as of December 31, 1960 and December 31, 1961, as follows:

	1960	1961	Increase
Total Assets	$8,585,586.91	$11,300,517.80	$2,714,930.89
Total Liabilities	5,665,479.12	7,031,079.66	1,365,600.54
Reserve for Medical Service	2,920,107.79	4,269,438.14	1,349,330.35
Total Liabilities and Reserves	$8,585,586.91	$11,300,517.80	$2,714,930.89

Medical Service is in a sound financial position, and the Board of Medical Service is keeping close watch on the Plan's financial experience. You may be sure that constructive action will be taken when needed and that the interests of the physicians participating in the plan will be considered along with the interests of subscribers whose funds we hold in trust.

Enrollment

As of December 31, 1961, there were 854,181 persons protected by Medical Service against the cost of medical expense, of which 415,852 were covered under the Federal Employee Program, and 438,329 were covered under the Surgical and Surgical-Medical contracts. The enrollment at the end of 1961 represents a gain of 36,314 participants during the year.

Of particular interest, however, is the fact that all of the Federal Employee subscribers are covered under the Supplemental Benefits provision of the Federal Employee contract, and 95,261 subscribers to the Surgical-Medical contract have supplemented their basic contracts with Major Medical coverage to protect them against the more extreme costs of medical care. Thus, about 55 per cent of all subscribers are protected under Major Medical or supplemental benefits, and nowhere else is so large a segment of the population protected against the cost of medical care in so great a degree.

Medical Service is the fifteenth largest Blue Shield Plan in numbers of subscribers enrolled, and it continues to lead all Blue Shield Plans in the percentage of the population enrolled. This is a most significant situation since, statistically speaking, two out of every three of your patients are enrolled in a Blue Shield program in which you have a voice and in which you participate actively. Forty physicians are serving on the Board of Trustees and its committees, and by this participation in the activities of Medical Service, physicians acquire a strong voice in the management of their own prepayment program.

Physician participation in Medical Service continues to increase. At the present time there are 2,660 physicians participating in the program, or 114 more than at the same time last year. The administration is fully aware of the impact of its operations upon the practice of Participating Physicians, and we feel we are extra sensitive to the problems of physicians in relation to the plan because of the numbers of our subscribers who make up your practice.

Operations

While the policy and direction of Medical Service stems from its Board of Trustees, the operating

---

* Presented at the Annual Meeting of Participating Physicians of Medical Service of the District of Columbia, May 9, 1962.

DENTAL SURGEON HEADS
CANCER SOCIETY

DR. WILLIAM P. HERBST (left), retiring President of the D. C. Division of the American Cancer Society, congratulates his successor, DR. HAROLD W. KROGH. Story on page 494.

functions have been entrusted to Group Hospitalization, Inc., under an agreement which provides that GHI will, in general, handle the administration of Medical Service. GHI has served Medical Service well in this respect. In 1961 the Claims Department processed 404,507 claims. The Claims Department is performing efficiently and effectively, and deserves credit for its record of processing 1,605 Medical Service claims every day, with a minimum of error or delay. Not included in this figure are the supplemental claims submitted by Federal employees in the Washington Area. The administration of this phase of the Federal Employee Program is under the direction of the National Blue Cross and Blue Shield organizations and it is not serviced as a local plan operation.

OPERATING EXPENSE

Because of the variety of services for which benefits are provided and the complex problems involved in processing numerous claims for a single illness, it is heartening to note that the operating costs of Medical Service in relation to subscription income have been reduced even further. In 1960 Medical Service reduced its operating expense to 6.6 per cent of subscription income, and in 1961 the operating expense was reduced to a low 5.9 per cent of earned subscription income. It has always been the goal of Medical Service and the administrative agency to keep operating costs at a minimum in order that the maximum portion of the subscriber's dollar could be reserved for payment of claims and future contingencies. We feel that the administration is deserving of real tribute in keeping costs to approximately half the average operating expense of the other Blue Shield Plans, without sacrificing due care and attention to the job at hand.

The record of Medical Service in comparison with other Blue Shield Plans is outstanding with respect to the three subjects I have just reviewed for you. First: For the 74 Blue Shield Plans in the United States and Canada, the average addition to reserves was 1.75 per cent of earned income. Medical Service added 7.38 per cent of its earned income to reserves. Second: Enrollment in all of Blue Shield increased 4.33 per cent; enrollment in Medical Service increased 4.48 per cent. While this enrollment figure is only slightly above the average of all Blue Shield Plans, it becomes more significant when it is recognized that Medical Service has already enrolled such large numbers of the community that the percentage of the population left to be enrolled is far less than that presented to other Blue Shield Plans. And third: The average operating expense of 74 Blue Shield Plans amounted to 9.5 per cent of earned income, while the operating expense of Medical Service amounted to only 5.9 per cent of earned income. This figure is the third lowest percentage of income devoted to operating costs of all Blue Shield Plans.

Medical Service is in a sound financial position; the public continues to express its confidence in the Plan by continuing enrollment; we have reason to take satisfaction in the manner in which the details of a complex and changing operation have been managed; and we have even more reason to recognize and give credit to the many physicians who contribute their time and interest to the problems affecting our program. The voice of the physician in the affairs of Medical Service gives needed direction to the administration in the accomplishment of its duties. We are all grateful to you for that interest and for your valuable help in keeping Medical Service progressive and sound.

GEORGE B. MCGOVERN
Executive Vice President

Lest We Forget

A Medical Report on the Mauthausen Concentration Camp*

CHARLES E. GOSHEN, M.D.

Associate Professor, Department of Psychiatry, West Virginia University Medical Center

After a long postwar quiescence we are beginning to witness a resurgence of interest in the atrocities of the Hitler régime. We cannot be reminded too often or too forcibly of the horrors which can occur in such a totalitarian régime. The following is an account of an experience of the author at the end of World War II. It is a summary made from copies of the medical reports he submitted from the Mauthausen Concentration Camp.

Toward the end of World War II in Europe I was assigned to a Medical Clearing Company as a medical officer. We were located in Eastern Bavaria where we had the responsibility for handling public health problems among the German military and civilian population. On May 6, 1945, the day before the German surrender, one of our armored divisions overran a concentration camp near Mauthausen, Austria, some 30 miles down the Danube River from the German border. A message from our Corps Headquarters directed us to send a task force of medical troops to the camp and to undertake whatever sanitary and medical measures we could to help the prisoners there. Accordingly, I was dispatched with 18 medical technicians and drivers and a medical administrative officer in six ambulances loaded with medical supplies.

It developed that our instructions concerning the location of the camp (which had been heretofore unknown to us) were incorrect. As a result we took a route along the south bank of the Danube only to find that we were on the wrong side of the river at the end of the prescribed trip. The point at which we arrived happened to be where the Ens River joins the Danube. A German Panzer Division was in the process of negotiating a surrender to the American 65th Division. At almost the instant we arrived the German commander had refused to accept the surrender terms and the fighting resumed with a brief, but surprising, flourish. We managed to find a ferry boat which was suitable for transporting our vehicles in two loads to the other side and found a local farmer who offered to operate it for us. We arrived on the north side of the Danube in the midst of the village of Mauthausen. This happened to be where the remains of the Hungarian army had become stranded, hopefully seeking an American outfit to surrender to. They elected to surrender to us and to do so in the most elegant of old-fashioned military traditions. Before proceeding on our mission, therefore, we had to await a great display of cavalry maneuvers, disarming of troops and acceptance of the Hungarian Commander's sword. This was immediately followed by loud requests from his men for *cigaretten und chocalade*, which they appeared to consider their reward for the ignominy of defeat. We directed them, however, to march along the river to the west until they came to the first PW camp.

We inquired from the local Austrians of the whereabouts of the concentration camp and questioned them concerning their knowledge of it. All professed to know very little about it, except that they had noticed many more people arriving by train to go to the camp than ever left it and that the camp had been built there in 1939. Incidentally, the Austrians all seemed quite ready to regard us, rather than the Germans, as their allies. We found the camp a few miles from town, situated on a high hill some two miles or so north of the river. It turned out to be a rather impressive, stone fortress-like structure with a prominent sign along the road leading to it, *Koncentrationlager Mauthausen*.

SANITARY REPORT

We spent the first day making an estimate of the situation, and the following is the Sanitary Report we submitted to our headquarters at the end of the next day:

"The camp appeared externally to be a modern, well-built prison constructed of stone from neighboring quarries (figures 1 and 2). It was said to have contained an average of 20,000 prisoners at a time. During the six years it had been open approximately 200,000 prisoners had been kept there, very few of

---

* Editor's note: For those physicians who served in World War II this will be a sad reminder. To the many young physicians it should be a warning that even civilized and educated peoples can sink to great depths under a totalitarian régime.

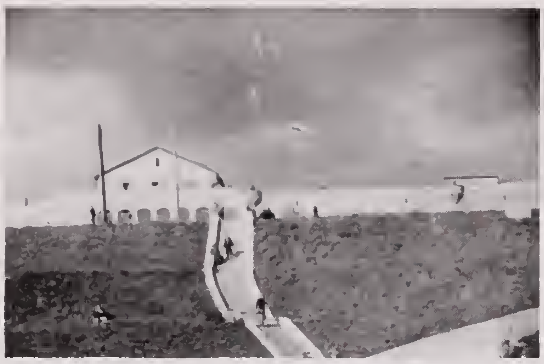


FIG. 1. View of front of camp.

them having left alive. In addition, we found three other smaller satellite camps: (a) Gusen No. 1, which held about 5,000 prisoners in simple army-type barracks about three miles away, (b) Gusen No. 2, which held about a thousand prisoners who were used to work on road construction and in the nearby rock quarries, and (c) The Women's Camp of Winergraben, which consisted of a large shed in a rock quarry housing 750 women. The main camp at the time of our first investigation was found to have about 16,000 prisoners, the remainder having fled when the German SS guard disappeared just before the American troops had arrived.

"Files in the camp commandant's office provided us with a convenient breakdown of the prisoners by nationality, as follows: 8 per cent French, 1 per cent Belgian, 1 per cent Dutch, 4 per cent German, 1 per cent Austrian, 4 per cent Hungarian, 3 per cent Czech, 1 per cent Slovak, 33 per cent Polish, 20 per cent Russian, 15 per cent Greek, 2 per cent Spanish, 5 per cent Italian, 7 per cent Yugoslav, and 9 per cent Allied prisoners of war (of whom nearly all were Russian soldiers). We found no British or Americans. About 200 of the prisoners were listed as "criminals," and the prisoners reported that this group enjoyed very favored positions in the camp. The records on the remainder listed their charges as "treason against the state." There were 1,200 women in the main camp, nearly all of whom were Hungarian Jews who had just recently arrived. No other Jews were found, although it was reported that some 100,000 of them had been killed there. An open field, enclosed in barbed wire, containing a large pit latrine and a single water faucet and a few wooden platforms, was known as the *Judenlager* and was said to be the site where the Jewish prisoners had been kept. Among the women were 23 children below the age of six, and many were only a few months old.

"Several prisoners were questioned concerning their arrests, and many of them claimed to have no knowledge of any reason for having been brought to the camp. Others described their activities in the resistance movements of France, Belgium and Holland. One Frenchman with whom we became quite friendly was a typical case. He had been a neurologist (Dr. Dubois), practicing in Paris at the time of the German occupation in July 1940, and insisted that he had been engaged in no political activities of any kind when he was summarily taken from his home one night, brought to the concentration camp, and had never had any contact with his family during the entire five years he had been a prisoner. He speculated that the commonness of his name might have been responsible for misidentification by the Gestapo, but he had never had any opportunity to ascertain the truth behind his arrest and incarceration. Compared with the others, he had been fairly well treated and had been employed as a camp physician among the prisoners.

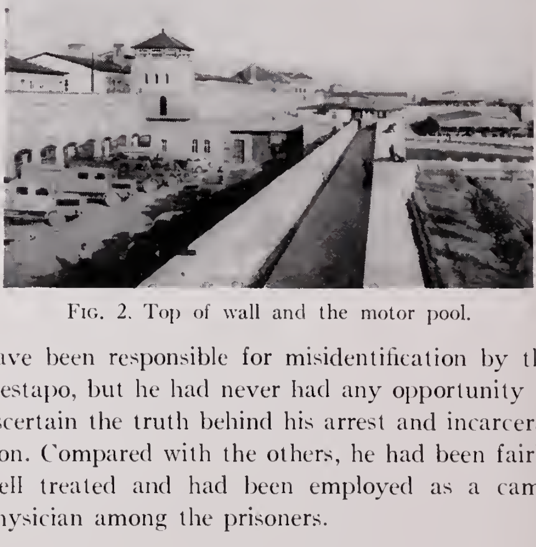


FIG. 2. Top of wall and the motor pool.

THE RUSSIAN LAGER

"There were many buildings within the main walled enclosure of the camp, some of which were barracks and others warehouses. Outside the enclosure was a group of guard barracks, and beyond them was a barbed-wire enclosed area containing six or seven long wooden barracks. This area was known as the "Russian *lager*" (figures 3, 4 and 5) and was used to house the prisoners who had become too sick or starved to work. Generally, they were placed there to die. We found 4,000 living skeletons there and numerous piles of dead bodies (figure 6). These were

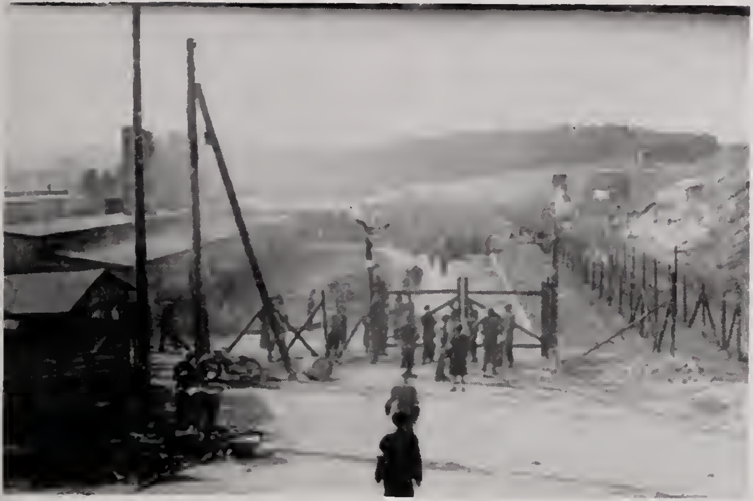


FIG. 3. Entrance to the Russian *lager*.

subsequently counted and found to number about 800. The barracks were found to be simple one-story structures 30 by 120 feet furnished solely with crowded triple-decker bunks. Each building contained about 900 prisoners, most of whom had become so emaciated that two or three fitted into each of the bed spaces. These prisoners had no clothing or shoes of any kind, and there was about one torn blanket for each three prisoners. Sanitary needs were met with three outdoor pit latrines and three water faucets coming out of the ground. Five physician-prisoners were trying to care for these people but had no medical supplies or food to meet any of their needs. Because of the danger of contagion the commander of the American division which had overrun the camp had posted a guard about this area and stopped all traffic flow in and out. As a result, we were the first of the Americans to enter it. The sights and smells of human misery which greeted us are impossible to describe, and the enormity of the medical task facing us was offset by the pathetic cries of hope which welled up in each barracks as we entered, with our Red Cross armbands making it clear what our mission was.

"Within the main enclosure we found groups of more sturdy buildings which housed the working prisoners. These were divided into *blocs* according to nationality, and each one had a *blocfueher* who was a prisoner himself. We also found a strange person known as the 'camp secretary,' who was also a prisoner and highly respected by the other prisoners. He could speak almost any language one could wish for and knew of everybody's history and their occupational skills. He became a very valuable ally when we began the next day to get our sanitary program under way, since he knew what prisoners we could use for various tasks, could translate for us, and knew where all supplies were kept. Still within this main enclosure there was another enclosure with a high stone wall around it, surmounted by guard towers, where the Russian prisoners were kept. We were immediately struck by the fact that the Russians seemed to be in much better states of nutrition and health than the others and assumed this to be due to a different kind of treatment. Our French physician friend advised us, however, that the difference was due to the fact that the Russians had practiced cannibalism. [We never ascertained the truth of this.]

"Also, within the main enclosure was a small hos-

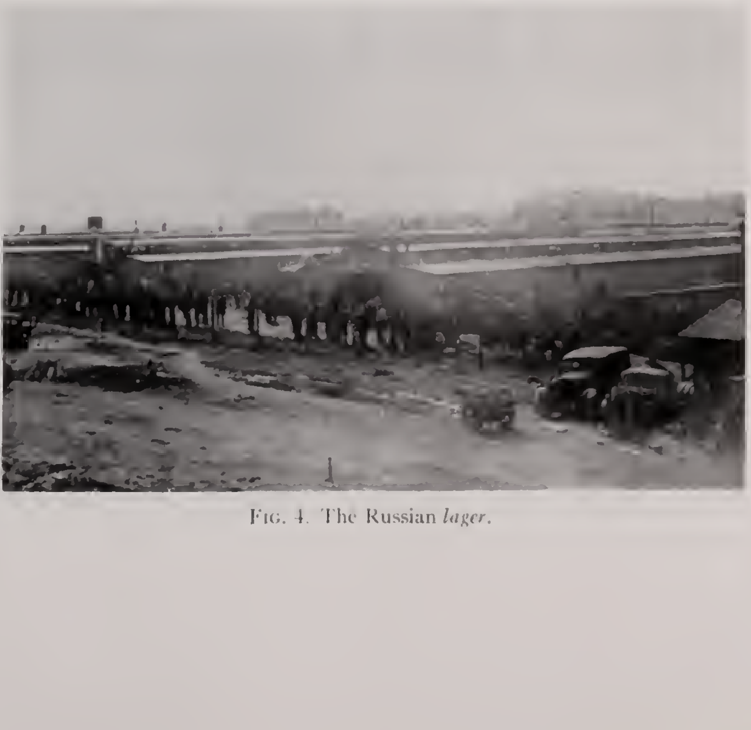


FIG. 4. The Russian *lager*.

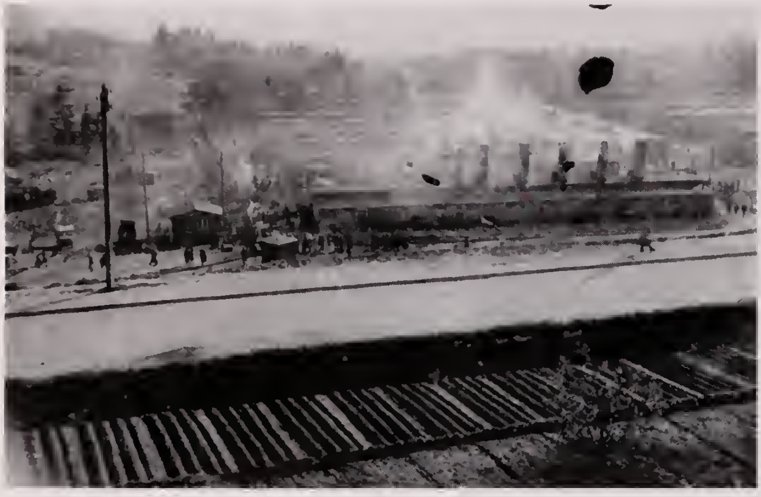


FIG. 5. The Russian *lager* from the wall.

pital of about 75 beds. It was completely equipped, clean, and staffed with three physician-prisoners. The *Chefartz* (Chief) was a Professor Padawa, who had been a Professor of Surgery at the University of Prague. [I have subsequently heard that the Professor is now teaching in Prague.] These physicians, although prisoners themselves, were on the camp payroll. The Professor received the highest salary, one mark per week. The unusually fine hospital accommodation turned out to have a purpose. It was used as a showpiece when visitors came. Only a tiny percentage of the sick and injured prisoners could have been cared for in the 75 beds. We learned later that admission to the hospital was somewhat less than a blessing, for it often meant that medical students from German schools would use these patients for experimental surgery. Professor Padawa told us that when this happened the patient was invariably sacrificed afterward, and that this was accomplished by means of an intravenous injection of benzine.

"Another small building equipped as a small hospital was found outside the camp enclosure. This had been used as a dispensary for the SS guards. We also discovered that there had been a number of women SS troops stationed at the camp (figure 7) whose function was rumored by the prisoners to be that of serving the recreational outlets of the male guards. The commandant of the camp had been there since the camp opened and was one of the first to run away as the American troops approached. A group of Russian prisoners, however, managed to track him down, and soon after our arrival they had brought him back. We admitted him to the hospital, hoping to save him for the war criminal trials, but he survived only a few hours from the dismemberment with which his former prisoners greeted him.

"Another building outside the main enclosure was a kitchen which prepared food for the prisoners. The entire equipment consisted of a half dozen large steam kettles, making possible only single dish meals. The prisoners had had nothing to eat for many weeks except a soup made from dehydrated beets. For the six months or so preceding that, bread had also been available. No meat of any kind had been served for nearly a year. We estimated the average weight of the prisoners to be less than 100 lbs. For the morning of our second day the prisoners received their first decent meal since their imprisonment, and this consisted of a stew made from a fine saddle horse which one of our men had appropriated from somewhere. As soon as we arrived we gave away all the emergency rations we had with us, but did not repeat this again after we saw several of the prisoners

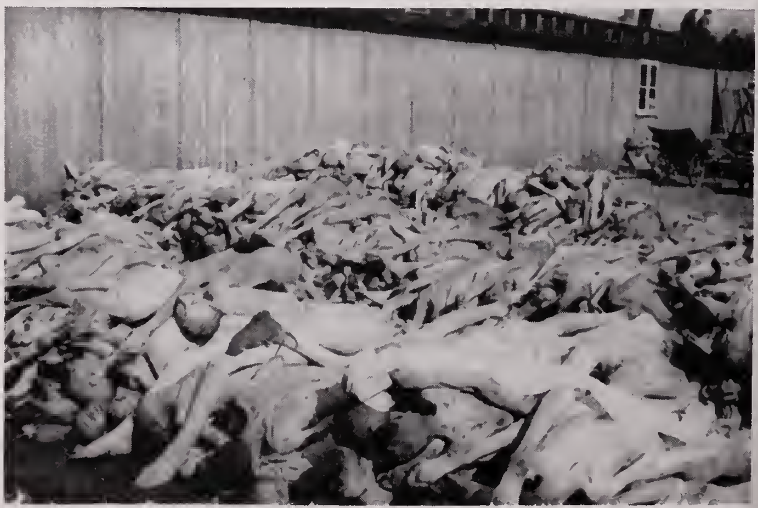


FIG. 6. Pile of bodies found in the Russian *lager*.

fall dead after eating our 'K' rations and 'D' bars. This unexpected experiment confirmed many of the suspicions we had already formed of the lethality of Army emergency rations.

"Among the alleged healthy and working prisoners of the main camp we estimated that there were about 1,000 seriously ill men, complicated by the universal malnutrition. They had avoided reporting their illnesses, for this often meant being sent to the Russian *lager* to die of simple neglect. Feeling these sick were the most salvageable, we immediately established a 'sick call' in the little hospital, with our enlisted technicians helping the physician-prisoners. Within a few minutes after announcing this service we had a waiting line of 700 seeking treatment, of whom several died while waiting to be seen.

COMMUNICABLE DISEASES

"Our first sanitary survey was directed toward uncovering communicable cases. We estimated there were 300 cases of typhus but increased this estimate to 800 the next day on closer study. We immediately found 127 cases of active tuberculosis and guessed there to be untold hundreds among the large group we had labeled 'inanition.' There were at least 1,000 cases of bacillary dysentery. This disclosure led us to discover that the water supply of the camp had been pumped directly from the Danube River into a camp reservoir and had been given no filtration or chlorination. Apparently the German guards had also been using the same contaminated water. We found one small building containing 45 seriously ill prisoners, all of whom had pneumonia. Both diphtheria and scarlet fever were common, but, surprisingly, not among the children. There were 1,100 cases of surgical infections, made up of compound fractures and a large number of phlegmons (large gangrenous cellulitis over the extremities and pressure points). There were about a hundred 'acute abdomens' which we guessed to be due to perforated dysentery ulcers. All prisoners were infested with lice, and the large number of typhus cases demonstrated to us an urgent requirement to delouse the entire camp as soon as possible. The death rate for the camp had been running about 250 to 300 per day, and the bodies had been disposed of in crematoria, but since this system had broken down days before there were dead bodies lying nearly everywhere in the camp but usually stacked in large piles. We found a pile with 400 bodies.

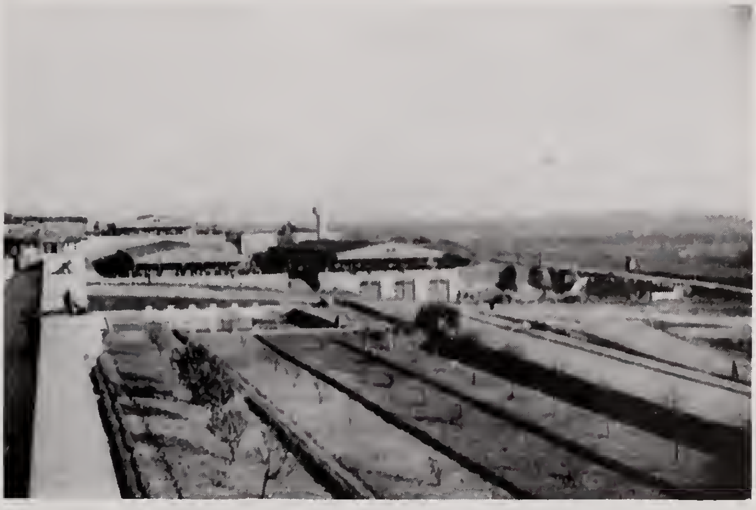


FIG. 7. SS women's barracks from the wall.

"A gas chamber was discovered with a pile of dead bodies nearby. We learned that cyanide gas was used on certain days of the week to disinfect clothing and blankets, while on other days it was used to execute prisoners. Numerous other devices were in evidence for use in torturing and punishing prisoners. In the main courtyard of the enclosure were iron collars on chains to which prisoners had been secured as punishment.

MENTAL APATHY

"The mental attitudes of the prisoners were striking and full of surprises for us. In general, they seemed to be apathetic, lacking in curiosity or interest in anything except food. They tended to wander aimlessly about, rarely communicating with us or with each other, and almost always in a solitary way. They maintained their national loyalties in an extreme degree, often refusing to work with, eat with, or even come close to prisoners of other nationalities. Strangely, though, they did not regard us Americans as foreign. Any request we made for work from them was silently obeyed, but there was no evidence of any initiative or follow-through on their part. We eventually collected a total of some 80 physicians among the prisoners, and, although they were generally in better physical condition than the others, they showed the same kind of listlessness. Overt psychosis was surprisingly rare except among the women prisoners, among whom we found many active schizophrenic reactions.

"Our initial survey led us to decide that our most pressing problems were to restore the water supply, which had been cut off for several days, with a consequent clogging of all plumbing with filth; to supply food until regular sources of supply could be established; to delouse all the prisoners and the buildings; and to provide some sort of hospital facilities for the ill."

RESTORING SANITARY FACILITIES

On our second day at the camp we started to put into effect the tentative plans we formulated. Fortunately, a team of two public health officials from UNRA arrived to assist us. We dispatched one of our ambulances back to our company headquarters to carry our recommendation for sending us all the medical supplies which could be spared and to arrange to have an Army Evacuation Hospital moved to the camp. The remainder of our vehicles and drivers were sent out to scour the countryside for whatever supplies could be located. We put about ten of our men in charge of labor details of prisoners to clean up the SS guard barracks, move in bunks and bed coverings, and prepare the buildings for hospitalizing the sick. One of our most resourceful sergeants was sent out to find out how to restore the electric power to the camp so that we could pump water into the empty reservoir. We were counting on the local division engineers for help in chlorinating the water, once we obtained it. Meanwhile, they helped us set up barrels of chlorinated water throughout the camp. Another of our men got together a detail of carpenters and tailors from among the prisoners to convert some of the German warehouse supplies into more beds and straw-filled mattresses. I concentrated on collecting all the prisoners who could be used as physicians and nurses to staff the wards as we readied them for occupancy. I found a goldmine of help in one of the women prisoners who had been a Mother Superior of nurses in a Catholic hospital. Although our delousing plan was a major operation, we were limited in how much we could accomplish by the fact that we had only two small spray guns and only a small barrel of DDT powder, so that we could assign only two men to the task of rounding up prisoners for spraying.

Within a short time we began to see results from our men who had been sent out to scavenge. An ambulance returned, for example, with a load of canned sausage from a German military warehouse which was discovered. Another brought back a number of loads of military uniforms which had been found on a barge in the Danube River. Another returned with the day's collection of milk from a local dairy. Our man on the electric power mission discovered that the power plant was to the east of us and within the Russian military zone (where we were marked the easternmost advance of our troops with an intervening 20 miles separating us from the Russians and containing the remains of the German army which had not yet surrendered). A group of us officers proceeded to the nearest Russian commander to see what we could do about restoring the power plant. Fortunately, we found no trouble in gaining their coöperation and managed to find an employee of the plant who agreed to repair a fallen power line to our camp and then to start the generators going (fortunately there was coal available for fuel). Our UNRA friends arranged in the nearest large town of Linz to assign a local bakery the task of diverting all their production to making bread for the camp.

By the end of the second day we had sufficiently readied a couple of barracks that we were able to start collecting some of the sick to hospitalize. We placed physician-prisoners in charge, assisted by some of the women as nurses under the supervision of our ex-nun. We began to notice an increasing number of typhus cases and decided that our delousing technique was inadequate for our job, so sought ways of improving our production. We solved the problem by confiscating a large power orchard spraying machine, mixing our DDT powder in kerosene (by this time we had a ton of DDT), and by the third day we were ready to spray on a grand scale. We did this by lining up the prisoners in an empty field, undressing and having them file by our spraying apparatus in a continuous line. The prospect of being freed of the itching of the body lice was sufficient incentive to gain the prisoners' coöperation. Within five days we had sprayed 16,000 people and all the buildings.

We thought we had made a great discovery when one of our men returned with the entire complement of troops and equipment of a German field hospital. Although we found immediate use for the ambulances in transferring patients to our newly established hospital wards, we found that the hostility of the camp prisoners to the German troops was too great to make effective use of them, so we sent them off to a PW camp. The competition, however, did serve to stimulate greater degrees of coöperation from the camp prisoners.

Meeting Minimum Hospital Needs

By the fifth day we had succeeded in filling our reservoir with chlorinated water and had most of the plumbing in the camp working. This greatly simplified our cleaning tasks. We now found that we had 4,000 sick and injured prisoners to hospitalize. We were succeeding in converting guard barracks into hospital wards, furnishing them with beds, straw mattresses and blankets, and staffing them with medical personnel from among the prisoner population at the rate of about 600 beds per day. By this time we began to receive substantial amounts of medical supplies. We found, however, that our physician-prisoners were so unfamiliar with the use of our intravenous sets, sulfa drugs, etc. that our enlisted men were more useful in administering treatment than they were.

Once we had hospitalized several hundred sick, we became aware of a new problem. Most of the sick were too weak to get out of bed, and nearly all had dysentery of some sort, while our supply of bedpans was only about a dozen. Since this is an item of equipment in American medical channels which is not needed as much as it is among less sanitary people, we looked for a German source of supply. Since word had reached us that a wrecked train behind the Russian lines contained German medical supplies we made a second visit to our nearest Russian commander to negotiate for them. In exchange for some soap and cigarettes we returned with an entire ambulance load of bedpans. We treated our severe malnutrition problems with plasma and glucose and with prophylactic sulfa drugs, and began to notice immediate results. We were unable to do any surgery for the time being but made much use of antibiotics in controlling the many infected wounds. At the end of the first week we estimated that we had used up at least two tons of medication and intravenous solutions.

By the seventh day we had managed to hospitalize our most severely ill patients and had them under some sort of medical care. On that day an Army Medical Clearing Company arrived to help. They set up their Clearing Station in tents, and we turned over an even thousand cases of malnutrition. In preparing for their arrival we had dug latrines in a field for them and had piped in water. As we had been doing since our arrival, the entire company got to work with refreshing American efficiency and worked night and day to care for their load of patients. By the eleventh day two American Evacuation Hospitals had arrived and were able to take over our entire operation. Although their commanders had originally opposed the idea they had finally accepted the recommendation we had forwarded to Corps headquarters to send their nurses as well as their male personnel. By this time food was arriving in adequate amounts and the Eighth Air Force had set up an air strip in Linz to evacuate prisoners who were able to travel.

After turning over our makeshift hospital center to the Army Evacuation Hospitals we performed a final survey of the "well" prisoners to see what unrecognized cases might be lurking among them, thinking particularly of preventing any contagious conditions from being released into other communities. On our final day we uncovered an additional 300 cases of tuberculosis and typhus which we hospitalized. Our death rate had been in the order of 300 per day at the beginning, and by the time we left, 11 days later, this had fallen to about 30 per day. The chaplains of our neighboring division had arranged for burials of all the dead. The first batch of burials was performed by bulldozing a trench several hundred feet long. For this occasion the chaplains had managed to arrange an impressive ceremony, and for the occasion had the entire population of the village of Mauthausen brought up to watch. The hope was that these people would finally gain some idea of what had been going on under their noses for six years without their appearing to know much about it.

(Continued on page 498)

Dr. Hussey Reëlected Chairman of the AMA Board

Dr. Hugh H. Hussey was reëlected Chairman of the Board of Trustees of the American Medical Association by the House of Delegates during the 111th Annual Meeting of the Association in Chicago, June 24–28. Dr. Hussey is Dean of Georgetown University School of Medicine and for many years was the D. C. Medical Society's senior delegate to the AMA.

The Chicago meeting was attended by more than 30,000 physicians and guests. Among those who attended from Washington were the Society's President, Dr. J. Spencer Dryden, and its delegates, Dr. Raymond T. Holden and Dr. C. Willard Camalier, Jr.

Dr. Edward R. Annis, a practicing surgeon of Miami, Fla., was voted President-elect of the AMA, to take office in 1963. Dr. Annis, who has served as Chairman of the AMA's Speakers Bureau, has appeared frequently over television during the past year as the major spokesman of the AMA's opposition to the King-Anderson bill for hospital care for the aged through Social Security.

Dr. Annis was born in Detroit, Michigan, in 1913. He obtained his degree in medicine from Marquette University School of Medicine in 1938. In 1948 he moved to Miami, where for ten years he was Chief of the Department of General Surgery at Mercy Hospital. He is presently Chairman of the Legislative Committee of the Florida State Medical Association and Editor-at-large for *Medical Economics*.

Dr. Hussey administered the oath of office to Dr. George M. Fister, of Ogden, Utah, the incoming President of the AMA, at special inaugural ceremonies held in the International Ballroom of the Conrad Hilton Hotel on Tuesday evening. The retiring President, Dr. Leonard W. Larson, of Bismarck, North Dakota, received a special award. Elected Vice President of the AMA for 1962–63 was Dr. J. P. Culpepper, of Hattiesburg, Miss.

Dr. Russell L. Cecil, of New York City, senior editor of the "Textbook of Medicine," now in its tenth edition, was named the 1962 winner of the Distinguished Service Award by the House of Delegates. He received the DSA Medal at the inaugural ceremonies. Dr. Cecil is one of the Nation's leading researchers in the field of arthritis.

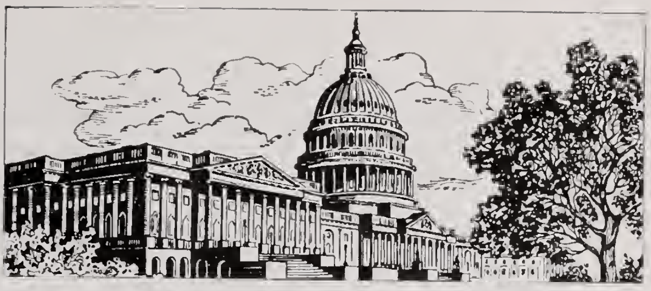
Dr. Hussey, who is President of the AMA Education and Research Foundation as well as Chairman of the Board, accepted a check of $100,000 from Mr. John T. Connor, President of Merck Sharp & Dohme, in behalf of the AMA Medical Education Loan Guarantee Program. The pharmaceutical company was the first to offer to match funds contributed by physicians to aid medical students. Dr. Hussey also accepted a check of more than $244,000 for the same purpose from Mrs. Harlan English, President of the National Woman's Auxiliary.

EDWARD R. ANNIS, M.D.
President-elect, AMA, 1962–63

Jackie Cooper, star of television, stage and movies, received a special citation from the AMA for his portrayal of a Navy doctor in the "Hennesey" TV program. Dr. Hussey presented the commendation to Mr. Cooper at a meeting of the House of Delegates.

Among award winners in the Scientific Exhibit were Drs. Roland B. Scott, Robert L. Baird, Joseph H. French, Daniel L. Weiss and Angella D. Ferguson, of Howard University College of Medicine, Freedmen's and the District of Columbia General Hospitals. They received Honorable Mention for their "Studies in Sickle Cell Disease."

(*Continued on page 498*)



NEWS & PERSONALS

Meetings

The XII International Congress of Dermatology will convene in Washington, D. C., September 9-15, 1962. This is the first time it has been held in the United States since 1907, 55 years ago. The Congress is sponsored by the American Academy of Dermatology and co-sponsored by the American Dermatological Association, the Section on Dermatology of the American Medical Association, the Society for Investigative Dermatology, and the Canadian Dermatological Association. Activities will be concentrated at the Shoreham and Sheraton Park Hotels.

Assisting Dr. Clarence S. Livingood, of Detroit, Secretary-General of the Congress, will be Dr. Hermann Pinkus, of Detroit, and Dr. Naomi M. Kanof, of Washington, Assistant Secretaries. Dr Kanof is also chairman of the Committee on Local Arrangements, and Dr. Peter N. Horvath, of Washington, is co-chairman of the Committee on Televised and Filmed Case Presentations.

Guests from foreign countries will be able to attend clinical presentations of patients on Thursday, September 13, at the University of Maryland Hospital and the Johns Hopkins Hospital, both in Baltimore, and the Walter Reed General Hospital in Washington. Live color telecasts, presented in coöperation with Smith, Kline & French Laboratories, will be transmitted over a closed circuit from Georgetown University Hospital to a large screen in one of the meeting rooms.

Three teams of translators will function simultaneously throughout the five-day scientific session, enabling physicians to hear most of the papers in either English, French, German or Spanish, the official languages of the Congress.

The Washington Heart Association and the Maryland Heart Association will hold combined scientific sessions, September 27, in the auditorium of the Clinical Center at the National Institutes of Health, Bethesda, Md. There will be day and evening symposia on Cardiovascular Drugs and Control of the Cardiovascular System by the Autonomic Nervous System. Programs will soon be available to members.

General News

Dr. James W. Watts, Chairman, presided at a meeting of the **Executive Board of the Medical Society of the District of Columbia,** June 18. Present for the first time at a meeting of the Board was Mr. George W. Cooley, who succeeded Mr. Theodore Wiprud as Secretary on July 1.

At the request of Dr. William T. Spence, the Board voted to reëstablish the Committee on Armed Forces and Veterans Affairs. This was the committee formerly known as the Committee on Veterans Affairs.

The Board was also agreeable with the suggestion of Dr. Christopher T. Bever, Chairman of the Committee on Medical Journal Exchange with Underdeveloped Areas, that this committee be redesignated the Journal Committee.

Dr. Zigmond M. Lebensohn, Chairman of the Committee on Mental Health, was asked to represent the Society at the National Congress on Mental

THE CHARLES STANLEY WHITE AWARDS FOR EXCELLENCE IN MEDICAL WRITING

On January 30, 1962 Dr. Charles Stanley White suggested that in order to stimulate medical writing among members of the Medical Society of the District of Columbia who have not been in practice more than ten years it might be well to offer a monetary award for the best surgical papers submitted in any one year to the MEDICAL ANNALS OF THE DISTRICT OF COLUMBIA. He generously offered to donate $300 for this purpose. It has been decided to have two awards, the first with an honorarium of $200 and the second with an honorarium of $100. The quality of medical writing, as well as the content of the manuscript, will be given high rating in the selection of the papers considered best by a committee of three impartial surgeons. It is hoped that these awards will stimulate members of the Society to submit papers in competition to the ANNALS. The awardees will be announced in the ANNALS in early 1963.

Manuscripts must be typed, double-spaced, and submitted to the Editor of the MEDICAL ANNALS OF THE DISTRICT OF COLUMBIA, 1718 M Street, N.W., Washington 6, D.C., not later than December 1, 1962.

Illness and Health, sponsored by the American Medical Association, to be held in Chicago, October 4, 5 and 6.

Each member of the Society will soon receive a copy of the latest Health Regulations of the District of Columbia concerning **"Communicable and Reportable Diseases."** So remind your secretary or nurse that when this small, yellow-colored booklet comes in the mail to keep it for reference and not to throw it away.

A new Directory of Blood Transfusion Facilities and Services has just been released by the Joint Blood Council of Washington, D. C. It is available at $5.00 prepaid from the Council at 1500 Massachusetts Avence, N.W., Washington 5, D. C. Another directory will not be issued for at least two years.

Listed in the Directory are 4,578 blood-handling institutions, including hospitals, Red Cross and community blood banks. Also included in the Directory are the central and regional consultative reference laboratories of the American Association of Blood Banks, the committees on blood of state medical societies, and state blood bank associations. Names and addresses of corresponding officials are provided.

Dr. Harold W. Krogh, dental surgeon and Chief of Oral Surgery at the Washington Hospital Center, was elected **President of the District of Columbia Division of the American Cancer Society,** June 12. Dr. Krogh, who has served as Vice President for the past two years, succeeded Dr. William P. Herbst, who has also served two terms as President. Dr. Krogh takes office on September 1.

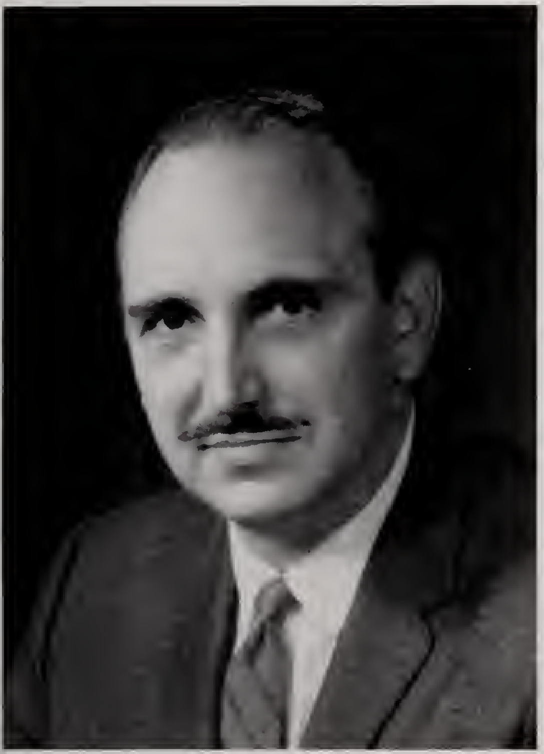
The election took place at a meeting of the Board of Trustees following the annual meeting of the Cancer Society at the National Housing Center. Dr. John Parks, Dean of George Washington University School of Medicine, Dr. Paul B. Cornely, head of the Department of Preventive Medicine and Public Health at Howard University Medical School, and Mr. Paul McDonald, Director of Administrative Services, U. S. Treasury Department, were named Vice Presidents. Mrs. Ralph E. Becker was elected Secretary and Mr. Frederick P. H. Siddons was reëlected Treasurer.

Highlight of the annual meeting was the presentation of the St. George Medal and citation for outstanding contribution to cancer control to Captain John W. Jamison, USN (Ret.), President of the Lost Chord Club of Washington. In presenting the award, President Herbst cited the many hours of service Captain Jamison had devoted to the cause of cancer control.

Dr. Herbst also gave ten-year awards for volunteer service to Dr. Clemens V. Rault, Dean of the School of Dentistry of Georgetown University, and to Mr. Clayton R. Sanders, Advertising Director of Peoples Drug Stores.

Many members of the D. C. Medical Society are active on the Board of Trustees. Newly elected to three-year terms were Drs. S. Joseph Cosimano, Jr., William T. Lady, Lois I. Platt, Cyril A. Schulman, and Warren J. Strudwick. Reëlected to the Board were Drs. Cornely, Parks, Krogh, Charlotte P. Donlan, Grace H. Guin, and Howard S. Madigan.

Elected to serve with the officers on the Executive Committee were Drs. Herbst, Madigan, J. Keith Cromer, Alfred A. J. Den, Ernest A. Gould, Robert S. Jason, Calvin T. Klopp, C. Roger Kurtz, Jack E. White, and Theodore Winship.



HOWARD C. PIERPONT, M.D.
President, Washington Heart Association

Dr. **Howard C. Pierpont** was elected **President of the Washington Heart Association** for 1962–63 at its annual meeting, June 25. Dr. Pierpont is Associate Professor of Surgery at George Washington University School of Medicine. Other officers elected were: Dr. Edward C. Freis, Vice President; Mr. Robert Ramspeck, Secretary; and Mr. Kenneth Birgfeld, Treasurer.

Elected to a three-year term on the Board of Directors were Dr. John B. Johnson and Mr. William M. Werber. Physicians reëlected to the Board for a three-year term were Drs. Freis, Pierpont, Edgar W. Davis, Henry D. Ecker, W. Proctor Harvey, and James Watt.

Dr. **Joseph F. Sadusk, Jr.,** of Oakland, California, has been appointed Professor of Preventive Medicine and Community Health at the **George Washington University School of Medicine** and Director of the University Hospital Clinics. He will assume his new duties on September 1.

Dr. Sadusk, a native of Baltimore, earned his medical degree at Johns Hopkins University in 1935. He was on the faculty of George Washington University in 1948–49 when he accepted an appointment from Stanford University, where he is presently Associate Clinical Professor of Medicine.

The faculty position in preventive medicine and community health is a new one at George Washington and is related to its expanded program in medical education. The new program will entail increased use of the clinic system in the education of medical students, improved diagnostic and treatment facilities for outpatients, and a renewed emphasis on patient care, teaching and research in the University Hospital clinics.

Mr. **Nate Haseltine,** for many years science writer for *The Washington Post* and known to most members of the D. C. Medical Society, was elected President of the National Association of Science Writers in Chicago, June 27, during its annual meeting.

Personals

Dr. **Robert H. Parrott** has been appointed the **first Director of Children's Hospital,** effective July 1. He will also continue in his present post, Physician-in-Chief, until a successor is appointed.

Dr. Parrott is a graduate (1949) of Georgetown University School of Medicine. He came to Children's as Physician-in-Chief in 1956 and has also served as Director of the Hospital's Research Foundation. He is Clinical Professor of Pediatrics at both Georgetown and George Washington University Schools of Medicine.

Miss Edith A. Torkington became Administrator Emeritus of Children's Hospital on August 1, and

ROBERT H. PARROTT, M.D.
Director of Children's Hospital

will serve as consultant to the Board of Directors and to the new Director.

Miss Torkington was appointed Administrator of Children's Hospital in 1949 after receiving a degree in hospital administration from Catholic University. She had served previously at Children's from 1928 to 1934, when she became Superintendent of the Children's Convalescent Home, now the Children's Convalescent Hospital. During World War II she served overseas as a Captain in the U. S. Army Nurse Corps.

New Fellows recently inducted into the American College of Obstetricians and Gynecologists are **Drs. William R. Claytor, Jorge Labarraque and William P. McKelway.**

This College now has a roster of more than 7,500 members, including Life, Associate and Junior Fellows. They include specialists in obstetrics and gynecology from all sections of the United States and Canada.

The Chairman of District IV is **Dr. Robert H. Barter,** of Washington. Section officers for the District of Columbia are **Dr. Philip P. Steptoe,** Chairman, **and Dr. James A. Dusbabek,** Vice Chairman.

Dr. Robert L. Howard, an Associate member of the D. C. Medical Society, assumed the office of President of the Heart Association of Northern Virginia on July 1. Dr. Howard is a graduate of the George Washington University School of Medicine and a member of its teaching faculty.

Dr. Joseph F. Schanno, who was called to active duty with the Army Reserves last October and stationed at Fort George G. Meade, Maryland, with the 354th General Hospital, returned from active duty on August 1 and has resumed his surgical practice in his former offices at 1150 Connecticut Avenue, N. W.

Dr. C. Herbert Marshall was elected Vice President of the American Association for Social Psychiatry at its meeting, June 16; **Dr. Edward C. Mazique,** retiring President, was appointed counsel to the President. **Dr. Louis S. London** was elected to fellowship in the Association.

Dr. J. W. Hoberman, an Associate member of the D. C. Medical Society, was elected First Vice President of Help for Retarded Children, Inc. on June 20.

Membership

The following applicants for membership were duly elected to membership by the Executive Board, June 18, 1962, in accord with Chapter II, Article VIII, of the Constitution and By-laws of the Society.

Active Members

Theodore H. Anders, 5415 Connecticut Avenue, N.W.
Thomas M. Arnett, 1025 Vermont Avenue, N.W.
Edward H. Bowen, Jr., 3000 Arlington Blvd., Falls Church, Va.
Gilbert M. Eisner, Georgetown University Hospital
Irene I-lien Hsu, George Washington University Hospital
Luis M. Lopez, Casualty Hospital
Stephen S. Pappas, U. S. Navy Dispensary

Associate Members

Alexander M. Burnett, Georgetown University Hospital
Victor S. Chupkovich, D. C. General Hospital
Mary Z. Daugela, Children's Hospital
Bruce L. Gilmore, Mt. Alto Veterans Administration Hospital
Stylianos D. Protonotarios, Washington Hospital Center

Split-felt Plaster Collar—Lipow and Fulcher

(*Continued from page 446*)

The collar has been employed to effect immobilization of the head following operations performed on the neck.

SUMMARY

During the past five years we have employed this split-felt plaster collar on many patients suffering with various affections of the neck and cervical spine. All of these patients have remained ambulatory, and most of them have continued to work. This collar has usually been quite comfortable, and frequently the patient has tolerated it when he had previously been unable to wear other types of collars. Very few individuals have objected to the appearance of the collar. All have welcomed the opportunity to keep the collar clean by removing the stockinet to launder it. Some of these patients have also received appropriate physiotherapy and the advantage of the judicious employment of injections of a local anesthetic containing corticosteroids. Most individuals have remained at work during the treatment, which has often contributed to successful therapy by promoting physical vigor and preventing moral erosion.

Hepatic Function and Chlorpropamide—Friedman

(*Continued from page 451*)

rare cases of obstructive disturbance of liver function are due to idiosyncrasy and can be prevented or moderated by acting on the warning signals of skin rash, eosinophilia, and altered liver function tests that may occur in the first few weeks of therapy.

ADDENDUM: Case 1. As of June 1, 1962, the patient was still being maintained on the same dosage and doing well.

Case 2. As of approximately May 1, 1962, the patient has had to have his dosage reduced; as of June 24, 1962, his daily dose was 600 mg. daily and he is doing very well.

REFERENCES

1. Alvi, A. W., and Maclean, J. P.: Ann. N. Y. Acad. Sci., 1959, **74**, 746.
2. Knick, B.: Ibid., 1959, **74**, 858.
3. Heinsen, H. A.: Ibid., 1959, **74**, 709.
4. Duncan, G. G., Schless, G. L., and Demeshkieh, M. M. A.: Ibid., 1959, **74**, 717.
5. Baertl, J. M., Owens, J. E., and Gabuzda, G. J.: Ibid., 1959, **74**, 863.
6. García Reyes, J. A., and others: Ibid., 1959, **74**, 1012.
7. Murray, I., Riddell, M. J., and Wang, I.: Lancet, 1958, **2**, 553; Letter to Editor. Ibid., 1960, **2**, 266.
8. Williams, R. H., Pollen, R. H., Tanner, D. C., and Barnes, R. H.: Ann. Intern. Med., 1959, **51**, 1121.
9. Hadley, W. B., Khachadurian, A., and Marble, A.: Ann. N. Y. Acad. Sci., 1959, **74**, 621.
10. Canessa, I., Valiente, S., and Mella, I.: Ibid., 1959, **74**, 752.
11. Rothfeld, E. L., Goldman, J., Goldberg, H. H., and Einhorn, S.: J.A.M.A., 1960, **172**, 54.
12. Reichel, J., Goldberg, S. B., Ellenberg, M., and Schaffner, F.: Amer. J. Med., 1960, **28**, 654.
13. Lee, C. T., Jr., Schless, G. L., and Duncan, G. G.: Ann. N. Y. Acad. Sci., 1959, **74**, 738.
14. Brown, G., Zoidis, J., and Spring, M.: J.A.M.A., 1959, **170**, 2085.
15. Baird, R. W., and Hull, J. G.: Ann. Intern. Med., 1960, **53**, 194.
16. Pines, K. L., Leifer, E., and Goodman, D.: Ann. N. Y. Acad. Sci., 1959, **74**, 997.
17. Dobson, H. L., and others: Ibid., 1959, **74**, 940.
18. Hamff, L. H., Ferris, H. A., Evans, E. C., and Whiteman, H. W.: Ibid., 1959, **74**, 820.
19. Steigmann, F.: Med. Clin. N. Amer., 1960, **44**, 183.
20. Burrell, Z. L., Jr., Martinez, A., and Burrell, L. O.: Ann. N. Y. Acad. Sci., 1959, **74**, 696.

Krukenberg Tumor and Cystadenomocarcinoma of Ovary—Janovski

(*Continued from page 455*)

ing these two entities has been emphasized. Considerable luteinization effect of the fibromatous connective tissue stroma of the involved ovary was observed. The opposite ovary presented marked cortical stromal hyperplasia with no evidence of neoplasia. Notwithstanding morphological evidence of ovarian steroid stimulation, there were no significant changes encountered in the endometrium.

The possibility of metastasis into a primary ovarian tumor or the development of a primary tumor concomitantly with the metastatic tumor should be kept in mind in assessing the malignant state in an ovary.

REFERENCES

1. Hertig, A. T., and Gore, H.: Tumors of the ovary and fallopian tubes, in Atlas of Tumor Pathology. Washington: Armed Forces Institute of Pathology, 1961, part 3, pp. 146-53.
2. Musante, C., and Ottaggio, G.: Pathologica, 1961, **53**, 43.
3. Neuweiler, W.: Lehrbuch der gynaekologischen Diagnostic. Bern, Swtz.: Verlag Hans Huber, 1958, pp. 401-2.
4. Krukenberg, F.: Arch. Gynaek., 1896, **50**, 287.
5. Rewell, R. E.: Obstetrical and Gynaecological Pathology. Edinburgh: E. S. Livingstone, 1960, pp. 205-9.
6. Flanagan, C. J., and Race, G. J.: AMA Arch. Path., 1954, **58**, 588.
7. Mosinger, M., and others: Bull. Ass. Franc. Cancer, 1960, **47**, 499.
8. Scully, R. E., and Richardson, G. S.: Cancer, 1961, **14**, 827.
9. Woodruff, D. J., and Novak, E. R.: Obstet. Gynec. (N. Y.), 1960, **15**, 351.
10. Numers, C. von: Geburtsh. Frauenheilk., 1960, **20**, 726.
11. Morris, J., and Scully, R. E.: Endocrine Pathology of the Ovary. St. Louis: Mosby, 1958, pp. 51-3.

Maternal Mortality in D.C.—Fraser

(*Continued from page 469*)

I want to repeat and repeat that the replacement of blood is ever a necessitous procedure for many gravid and parturient patients and is a procedure which may be necessary in any gravid patient at any time during pregnancy, labor, or the puerperium.

In the 1,620 maternal deaths obstetric shock was caused by hemorrhage in 30 per cent, by embolism in 10 per cent, by amniotic fluid embolism in 0.1 per cent, and by "exhaustion state" in 0.2 per cent. Whenever blood replacement is necessary in any of these complications the early detection of renal failure should be treated. The definite indications for the use of the artificial kidney should be understood by all who assay the care of the gravid patient.

In closing, may emphasis be placed, as it was by Dr. Fraser, on the fact that of the patients who died, those with pregnancy one, pregnancy two, or pregnancy three still led in the maternal deaths.

May it also be noted that necropsy was performed on 84 per cent of the patients who died in the time 1950 to 1959. Many salient lessons may be taught from these necropsy findings.

This splendid and detailed report certainly answered the query, "Should the Obstetric Board continue its work?" The answer is, yes. This report deserves careful reading and a much fuller discussion than is given it tonight.

Lest We Forget—Goshen

(*Continued from page 491*)

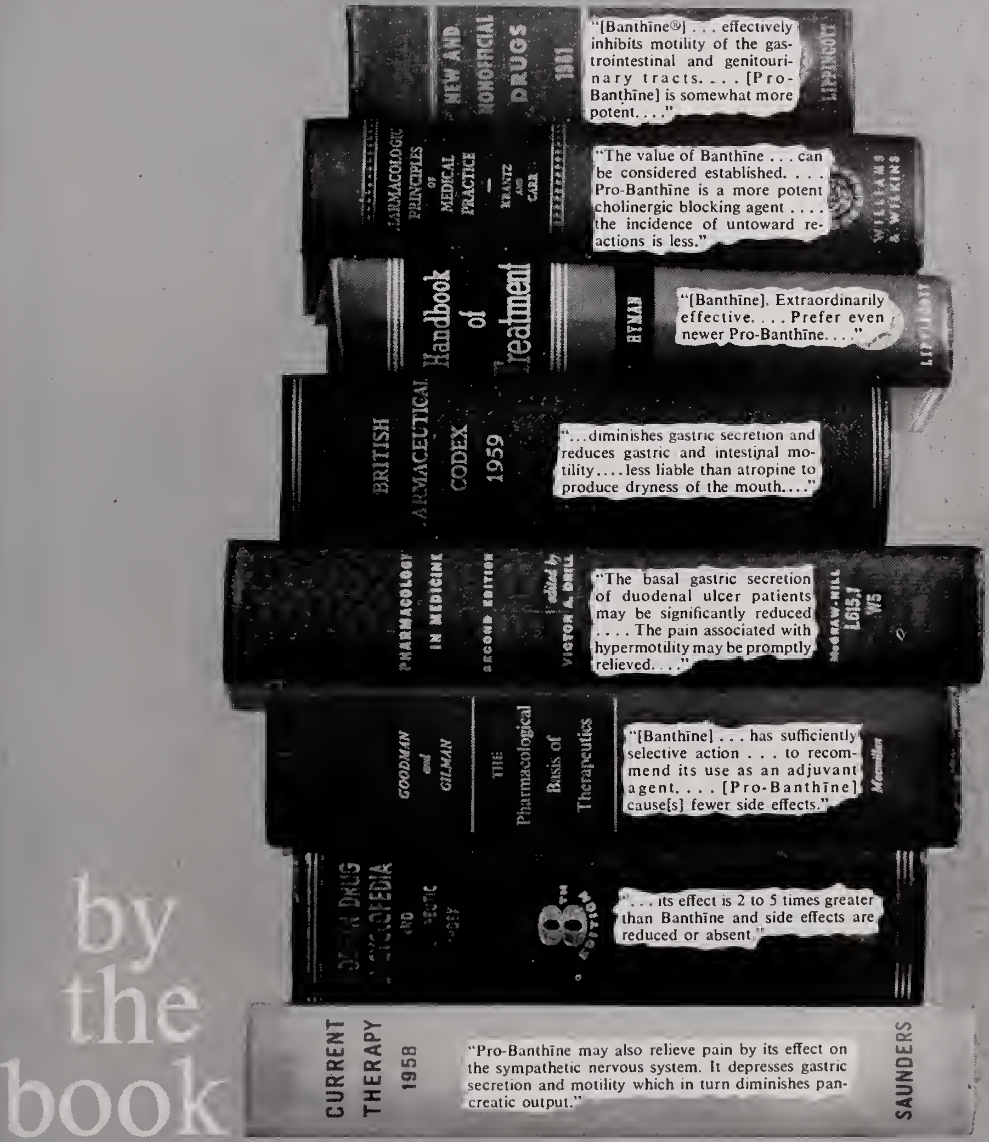
(Some interesting coincidences have turned up since the experience of the Mauthausen Concentration Camp. While in practice on Long Island after the War, I had occasion to care for a patient who had been one of the women prisoners at the camp. She had married a Jewish chaplain from an Army unit nearby and thus had gotten to the United States. At the present time I am working in an office where there is a French woman employed who had also been a prisoner at Mauthausen. She married an Army medical technician who is now stationed at Walter Reed Army Hospital.)

AMA Meeting

(*Continued from page 492*)

Dr. Albert H. Coons, of Harvard Medical School, a career investigator for the American Heart Association, received the $5,000 Passano Award for 1962 on Wednesday evening, June 27. A reception and dinner was held in his honor at the Palmer House.

Winner again in the 25th Annual Exhibit sponsored by the American Physicians' Art Association was Dr. Milton L. Goldman, a Washington surgeon. He received first award in Abstracts—Watercolors for "Cavern," and two second awards: Figure Composition in Oils—"Dempsey's Boathouse" and Sculptures—"Seated Figure."


NEW AND NONOFFICIAL DRUGS 1961
LIPPINCOTT
ARMACOLOGIC PRINCIPLES OF MEDICAL PRACTICE
KRANTZ AND CARR
WILLIAMS & WILKINS
Handbook of Treatment
HYMAN
LIPPINCOTT
BRITISH ARMACEUTICAL CODEX 1959
PHARMACOLOGY IN MEDICINE
SECOND EDITION
edited by VICTOR A. DRILL
McGRAW-HILL
615.1
W5
GOODMAN and GILMAN
THE Pharmacological Basis of Therapeutics
Macmillan
8TH EDITION
CURRENT THERAPY 1958
SAUNDERS
by the book

"[Banthīne®] . . . effectively inhibits motility of the gastrointestinal and genitourinary tracts. . . . [Pro-Banthīne] is somewhat more potent. . . ."

"The value of Banthīne . . . can be considered established. . . . Pro-Banthīne is a more potent cholinergic blocking agent . . . . the incidence of untoward reactions is less."

"[Banthīne]. Extraordinarily effective. . . . Prefer even newer Pro-Banthīne. . . ."

". . . diminishes gastric secretion and reduces gastric and intestinal motility. . . . less liable than atropine to produce dryness of the mouth. . . ."

"The basal gastric secretion of duodenal ulcer patients may be significantly reduced . . . . The pain associated with hypermotility may be promptly relieved. . . ."

"[Banthīne] . . . has sufficiently selective action . . . to recommend its use as an adjuvant agent. . . . [Pro-Banthīne] cause[s] fewer side effects."

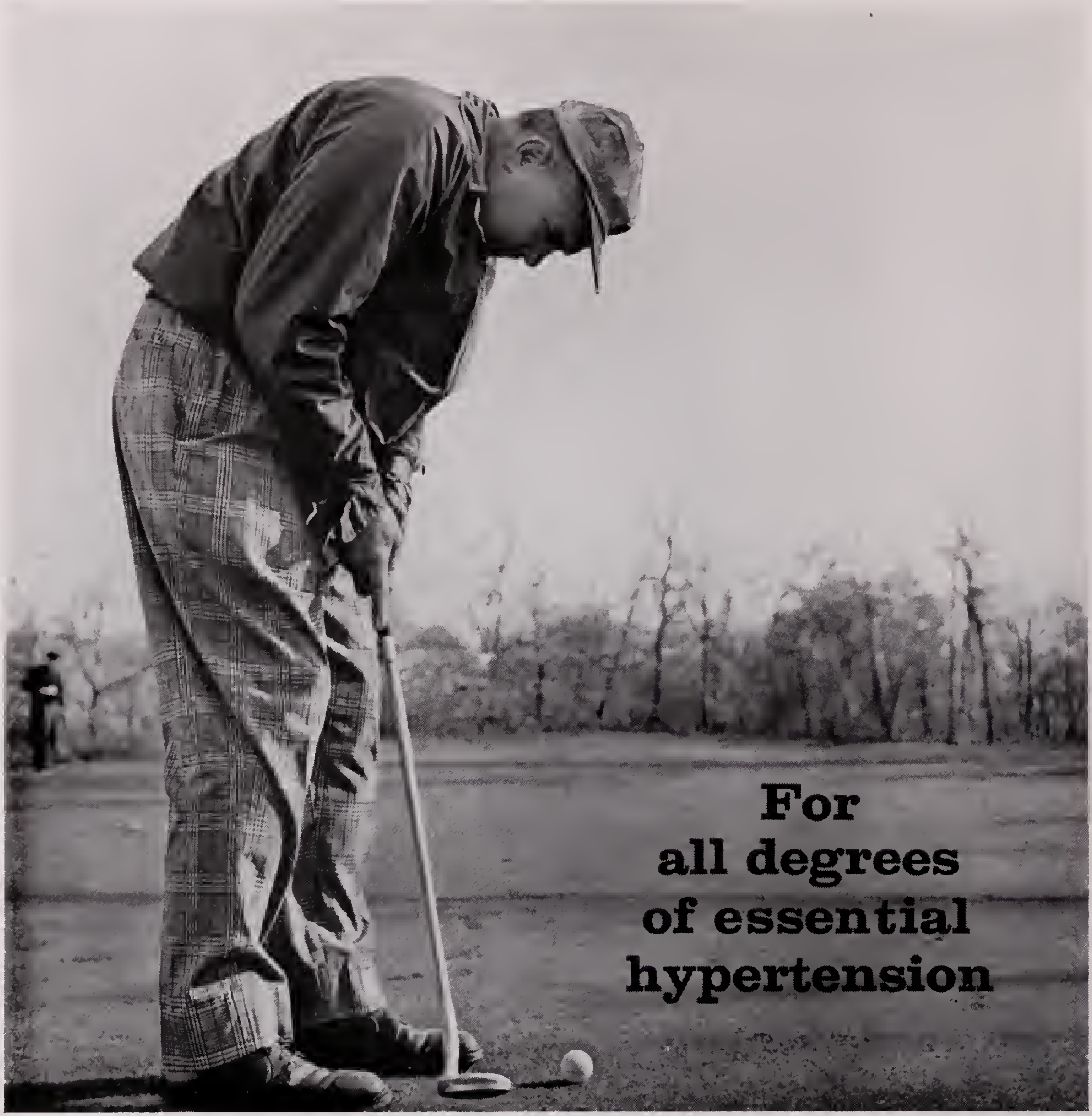
". . . its effect is 2 to 5 times greater than Banthīne and side effects are reduced or absent."

"Pro-Banthīne may also relieve pain by its effect on the sympathetic nervous system. It depresses gastric secretion and motility which in turn diminishes pancreatic output."

PRO-BANTHĪNE®

(brand of propantheline bromide)

G. D. SEARLE & CO., CHICAGO 80, ILLINOIS *Research in the Service of Medicine*



"relief of symptoms is striking with Rautrax-N"[†]

Rautrax-N decreases blood pressure for almost all patients with mild, moderate or severe essential hypertension. Rautrax-N also offers a new sense of relaxation and well-being in hypertension complicated by anxiety and tension. And in essential hypertension with edema and/or congestive heart failure, Rautrax-N achieves diuresis of sodium and chloride with minimal effects on potassium and other electrolytes.

Rautrax-N combines Raudixin (antihypertensive-tranquilizer) with Naturetin c̄ K (antihypertensive-diuretic) for greater antihypertensive effect and greater effectiveness in relief of hypertensive symptoms than produced by either component alone. Rautrax-N is also flexible (may be prescribed in place of Raudixin or Naturetin c̄ K) and economical (only 1 or 2 tablets for maintenance in most patients).

Supply: Rautrax-N — capsule-shaped tablets providing 50 mg. Raudixin, 4 mg. Naturetin and 400 mg. potassium chloride. *Rautrax-N Modified* — capsule-shaped tablets providing 50 mg. Raudixin, 2 mg. Naturetin and 400 mg. potassium chloride.

[†] Hutchison J. C.: Current Therap. Res. *2*:487 (Oct.) 1960.

For full information, see your Squibb Product Reference or Product Brief.

Rautrax-N*

Squibb Standardized Rauwolfia Serpentina Whole Root (Raudixin)
and Bendroflumethiazide (*Naturetin) with Potassium Chloride

SQUIBB

Squibb Quality —
the Priceless Ingredient
SQUIBB DIVISION Olin

'RAUDIXIN'®, 'RAUTRAX'®, AND 'NATURETIN'® ARE SQUIBB TRADEMARKS.

halves
the dosage requirements
in most cases
of ringworm

Schering

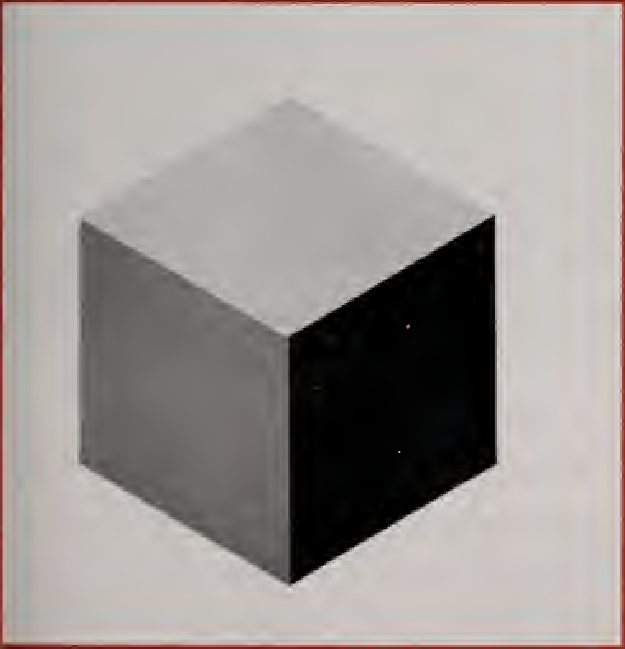
new
fulvicin-U/F™
brand of griseofulvin, ultra-fine

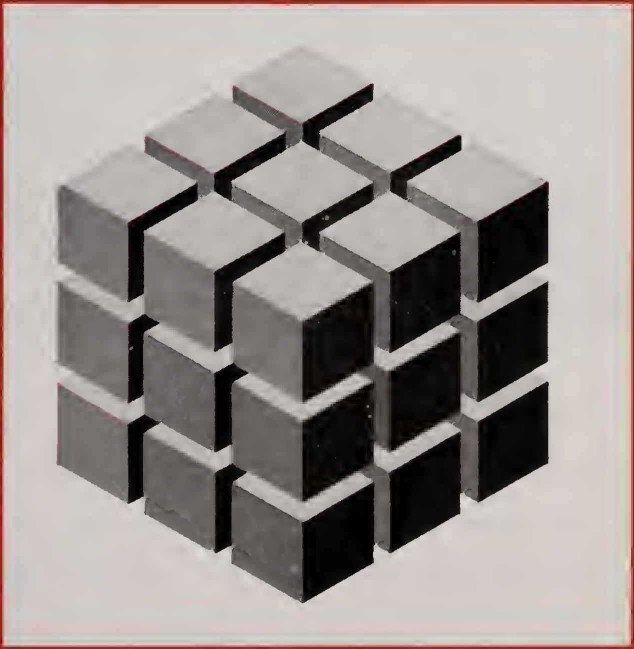
improved, ultra-fine form—new 125 mg. tablet—for greater patient economy

3 times greater surface area → *Improved absorption* → *Higher blood levels* → *Greater efficiency*

Supplied: FULVICIN-U/F Tablets, scored, 125 mg., 250 mg. and 500 mg., each in bottles of 60 and 250 tablets. For complete details, consult latest Schering literature available from your Schering Representative or Medical Services Department, Schering Corporation, Bloomfield, New Jersey. S-977

triples the particle surface area





after surgery: vitamins are therapy

Nutritional supplementation is basic to postoperative care. Therapeutic allowances of B and C vitamins help meet increased metabolic requirements and compensate for stress depletion. STRESSCAPS can set the patient on a more favorable course and contribute to full recovery. Packaged in decorative "reminder" jars of 30 and 100.

Each capsule contains:	
Vitamin B_1 (Thiamine Mononitrate)	10 mg
Vitamin B_2 (Riboflavin)	10 mg
Niacinamide	100 mg
Vitamin C (Ascorbic Acid)	300 mg
Vitamin B_6 (Pyridoxine HCl)	2 mg
Vitamin B_{12} Crystalline	4 mcgm
Calcium Pantothenate	20 mg

Recommended intake: Adults, 1 capsule daily or as directed by physician, for the treatmen of vitamin deficiencies.

LEDERLE LABORATORIES, A Division of AMERICAN CYANAMID COMPANY, Pearl River, N.Y.

STRESSCAPS®

Stress Formula Vitamins Lederle

NTZ Nasal Spray gives prompt, dependable decongestion of the nasal membranes for fast symptomatic relief of hay fever. The first spray shrinks the turbinates, restores nasal ventilation and stops mouth breathing. The second spray, a few minutes later, improves sinus ventilation and drainage. Excessive rhinorrhea is reduced.

NTZ is more than a simple vasoconstrictor. It contains Neo-Synephrine® HCl 0.5%—the efficacy of which is unexcelled—to shrink nasal membranes and provide inner space; Thenfadil® HCl 0.1% for potent topical antiallergic action; and Zephiran® Cl 1:5000 (antibacterial wetting agent) to promote the spread of the decongestant components to less accessible nasal areas. NTZ is well tolerated and does not harm respiratory tissues.

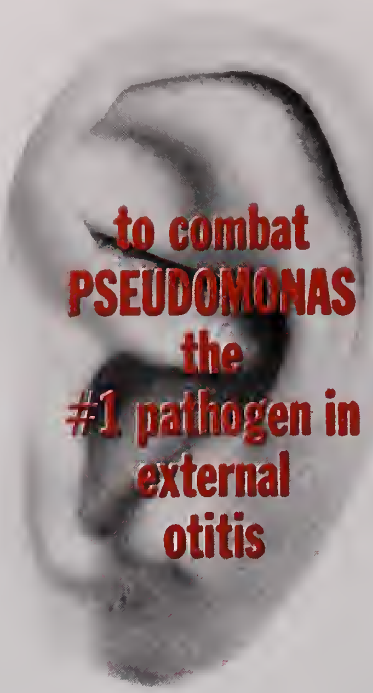
NTZ Nasal Spray also provides decongestive relief for head colds, perennial rhinitis and sinusitis. Supplied in leakproof, pocket-size, squeeze bottles of 20 ml. and in bottles of 30 ml. with dropper.

helps hay fever patients forget the "season"

NTZ® Nasal Spray

Winthrop
LABORATORIES
New York 18, N. Y.

NTZ, Neo-Synephrine (brand of phenylephrine), Thenfadil (brand of thenyldiamine) and Zephiran chloride (brand of benzalkonium chloride, refined)


to combat
PSEUDOMONAS
the
#1 pathogen in
external
otitis

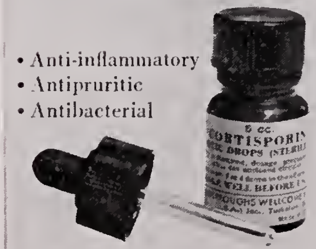
'CORTISPORIN'® brand

OTIC DROPS (sterile)

the #1 therapy for inflamed, infected ears

Because it provides Polymyxin B for the eradication of Pseudomonas, the prime cause of external otitis, 'Cortisporin' is the logical choice of treatment for inflamed, infected ears. Polymyxin B is the antibiotic specific for *Pseudomonas aeruginosa* infections, and is, for this pathogen, the standard of effectiveness against which other antibacterials are measured.

- Anti-inflammatory
- Antipruritic
- Antibacterial


5 cc.
CORTISPORIN
OTIC DROPS (STERILE)
SHAKE WELL BEFORE USING
BURROUGHS WELLCOME

Each cc. contains:

'Aerosporin'® brand Polymyxin B sulfate	10,000 units
Neomycin Sulfate (Equivalent to 3.5 mg. Neomycin Base)	5 mg.
Hydrocortisone	10 mg. (1%)

Bottles of 5 cc. with sterile dropper.

Literature available on request.

BURROUGHS WELLCOME & CO. (U.S.A.) INC., Tuckahoe, N. Y.

convenient
Fast-acting NaClex spares your patient the inconvenience of long, drawn-out diuresis. Taken in the morning, or by early afternoon, it completes desired water loss before bedtime.

persevering
Although fluid excretion returns to nearly normal 12 hours after one NaClex tablet, the excretion of sodium and chloride ions continues above control values for 24 hours or more.

reassuring
Prompt fluid and weight losses with NaClex encourage your patients, promote confidence and cooperation. NaClex often allows a more liberal dietary salt intake for selected patients.

versatile
Also an effective antihypertensive agent, NaClex can be used alone in mild hypertension or used to potentiate other hypotensive drugs. Since patients seldom develop a tolerance to NaClex, it can often be used with continuing efficacy in the long-term ancillary treatment of congestive heart failure, hypertension, or obesity.

Each NaClex tablet contains benzthiazide, 50 mg.

*R. V. Ford: Cur. Ther. Research, 2:51, 1960.

**A. H. Robins Co., Inc.
Richmond, Virginia**

completes 82% of its diuretic effect in just 6 hours— 96% in 12!*

NaClex® works fast!

benzthiazide,
Robins

Available in Canada as Exna®

THE MARCHING CHILDREN

How long would it take 500,000 children to pass through your office?

That's a tremendous army of patients—but it is the number of children under 14 whose lives you and your colleagues have saved since 1935 in just four diseases—tuberculosis, syphilis, influenza and pneumonia. And among working-age victims 2,000,000 are alive today who would not have survived if the 1935 death rate had remained constant.

In the past 25 years, new and potent drugs have played a significant role in reducing mortality from these diseases. Such an achievement results from the combined efforts of many organizations, professions and enterprises... including people working in medical and pharmaceutical research, production, and distribution, who make drug products available to doctors and dentists, hospitals and pharmacies, and to public and voluntary health agencies.

The prescription drug industry is proud of its role in this great work.

THIS MESSAGE IS BROUGHT TO YOU ON BEHALF OF THE PRODUCERS OF PRESCRIPTION DRUGS.
PHARMACEUTICAL MANUFACTURERS ASSOCIATION • 1411 K. STREET, N. W., WASHINGTON, D. C.

NEW!

DECHOLIN-BB®

COUNTERACTS 3 COMMON CAUSES
in functional G.I. disturbances
related to hepatobiliary dysfunction

TENSION
butabarbital sodium
(Warning: may be habit-forming)
15 mg. (¼ gr.)

SPASM
belladonna extract
10 mg. (⅙ gr.)

STASIS
dehydrocholic acid, Ames
250 mg. (3¾ gr.)

Available: Bottles of 100 tablets.

for **spasm** and **stasis**

DECHOLIN® WITH BELLADONNA
belladonna extract, 10 mg. (⅙ gr.)
dehydrocholic acid, Ames, 250 mg. (3¾ gr.)

for **stasis** alone

DECHOLIN®
dehydrocholic acid, Ames, 250 mg. (3¾ gr.)

Available: Bottles of 100 and 500 tablets.

Average Adult Dose—Decholin-BB, Decholin with Belladonna, and Decholin—1 or, if necessary, 2 tablets three times daily.
Contraindications: Biliary tract obstruction, acute hepatitis, and (Decholin with Belladonna and Decholin-BB) glaucoma or prostatic hypertrophy. 19562

AMES
COMPANY, INC
Elkhart • Indiana
Toronto • Canada

Carry it . . .

Even a petite nurse can easily pick up and carry a Sanborn Visette® electrocardiograph wherever it's needed — in the office, on house calls, in the clinic or laboratory. Not much bigger than a doctor's bag, the Visette weighs only 18 pounds — with all accessories.

And as portable as it is, a Visette nevertheless equals any "office standard" ECG in recording quality and accuracy. Every record is sharp, clean, permanent and — as you expect from Sanborn Company — diagnostically accurate. Compactness and ruggedness for travel are achieved by the practical means of modern miniaturized circuitry, not by sacrificing accuracy.

If you prefer the greater versatility of two chart speeds, three recording sensitivities and provision for recording and monitoring other phenomena, the Model 100 Viso-Cardiette is a logical choice. And when these capabilities are needed in a mobile instrument, the mobile cabinet version (Model 100M) is designed to be easily rolled to bedsides in hospital or clinic.

Regardless of which of these three instruments you choose, each has a valuable and unique feature: Sanborn service. It lasts long after the sale . . . from people who know your ECG and value your satisfaction.

wherever you need "on-the-spot" cardiography

SANBORN COMPANY
MEDICAL DIVISION *Waltham 54, Mass.*

BETHESDA *Branch Office* 8118 Woodmont Ave.
Oliver 6-5170 and 6-5171
BALTIMORE *Resident Representative* 12 East 24th St., 889-1117,1118

Put your low-back patient back on the payroll

Soma relieves stiffness –stops pain, too

YOUR CONCERN: Rapid relief from pain for your patient. Get him back to his normal activity, *fast!*

HOW SOMA HELPS: Soma provides direct pain relief while it relaxes muscle spasm.

YOUR RESULTS: With pain relieved, stiffness gone, your patient is soon restored to full activity—often in days instead of weeks.

This was demonstrated by Kestler in a controlled study: average time for full recovery was 11.5 days with Soma, 41 days without Soma. (J.A.M.A. **172**:2039, April 30, 1960.)

Soma is notably safe. Side effects are rare. Drowsiness may occur, but usually only in higher dosages. Soma is available in 350 mg. tablets. USUAL DOSAGE: 1 TABLET Q.I.D.

The muscle relaxant with an independent pain-relieving action

SOMA®

(carisoprodol, Wallace)

Wallace Laboratories, Cranbury, New Jersey

Listen . . . good news!

GET BROADER PROTECTION AGAINST CLAIMS RESULTING FROM PRACTICE OF MEDICINE

with St. Paul's Professional Liability Insurance

1. **Broader Protection.** A *St. Paul* policy assures you of complete "professional services" protection.

2. **Absence of Exclusions.** All professional liability policies are not the same. The *St. Paul* policy has only one exclusion—Workman's Compensation as it applies to your own employees.

3. **Experienced, Sound Company.** The *St. Paul* has established an enviable record of competence extending over more than 100 years.

4. **Effective Defense and Prevention.** Close liaison with doctors and medical societies helps the Company to pinpoint areas of risk and to develop educational material which assists doctors in avoiding claims.

For complete information on "broader protection" Professional Liability Insurance see your nearest *St. Paul* agent.

THE ST. PAUL
INSURANCE COMPANIES

Serving you around the world... around the clock

St. Paul Fire & Marine Insurance Company
St. Paul Mercury Insurance Company
Western Life Insurance Company

Approved Carrier of The Medical Society of the District of Columbia

The following Agents are ready to serve you and are as close as your telephone:

M. Abrams & Co., 514 Washington Bldg.
Washington 5, D.C. NAtional 8-6578

Anderson & Company, Inc., 1832 M St., N.W.,
Washington 6, D.C. FEderal 8-4730

A. H. Baker & Company, 930 Woodward Bldg.,
Washington 5, D.C. EXecutive 3-2460

District Agency Company, 800 Investment Bldg.
1511 K Street, N.W., Washington 5, D. C.
NAtional 8-8756

Eig & McKeever, % Eig & McKeever
Silver Spring, Maryland. JUniper 8-8200

Feldmann Insurance Agency, 267 Carroll St., N.W.,
Washington 12, D.C. TUckerman 2-4079

Greater Washington Agency, Inc., 419 Union
Trust Building, Washington 5, D. C.
STerling 3-8383

Harrell Brothers & Campbell, Suite 101,
1757 K St., N.W., Washington 6, D.C.
STerling 3-3555

Insurance Services Co., Inc.
3408 Wisconsin Ave., N.W.
Washington 16, D.C.
WOodley 6-8180

Lampson & Ashley Ins. Agency
7044 Carroll Ave., Takoma Park, Md.
JUniper 5-7166

LeRoy Mark, Inc., 408 Colorado Bldg.,
Washington 5, D.C. NAtional 8-0601

Martens & Moore. Inc.. 3408 Wisconsin Ave., N.W.,
Washington 16, D.C. EMerson 3-5300

McDermott Insurance, 1130 17th St., N.W.,
Washington 6, D.C. DIstrict 7-1114

Harry Merkin Company, 815 15th Street, N.W.,
Washington 5, D.C. STerling 3-4977

H. Gabriel Murphy & Co., Inc.,
1001 Connecticut Ave., N.W., Washington 6, D.C.
DIstrict 7-9300

Howard W. Phillips & Co., 1820 N St., N.W.,
Washington 6, D.C. FEderal 8-2121

Russell, Marsh & Kennedy, Inc.. Marsh Building,
1832 M St., N.W., Washington 6, D.C.
FEderal 8-7600

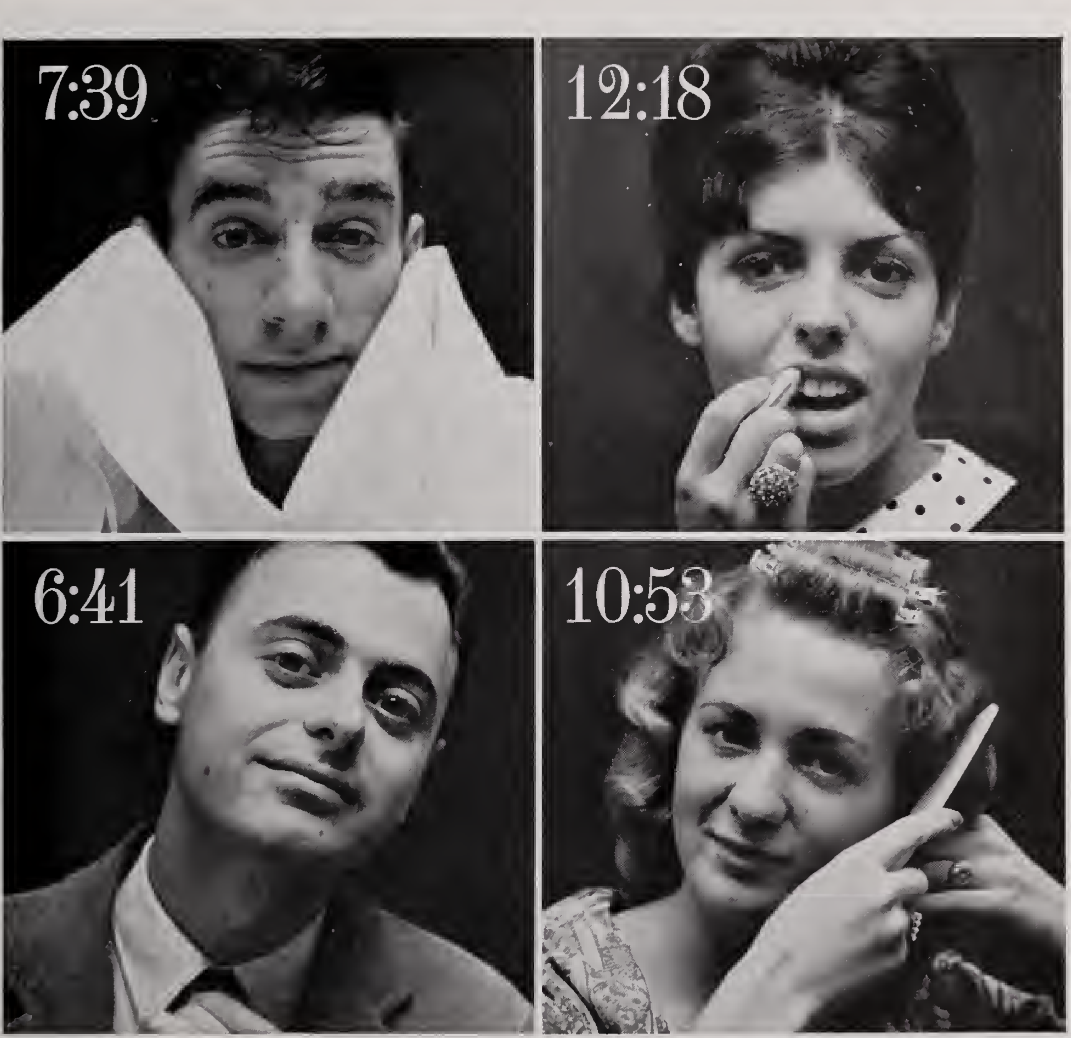
Victor O. Schinnerer & Co., Inc.
1131 Investment Bldg., Washington 5, D.C.
REpublic 7-1929

Walker & Dunlop Agency, Inc.
905 16th Street, N.W.
Washington 6, D.C.
STerling 3-5050

Watson & Watson, Sheraton Bldg.,
711 14th St., N.W., Washington 5, D.C.
DIstrict 7-7166

Young & Simon, 340 Woodward Bldg.,
Washington 5, D.C.
DIstrict 7-5180

WASHINGTON, D.C. OFFICE
910 17th St., N.W. Washington 6, D.C.
COMPLETE CLAIMS SERVICE—Tel. 296-4474



In acne—24-hour-a-day skin care with antibacterial pHisoHex®

(contains 3% hexachlorophene)

In acne, pHisoHex, antiseptic detergent, provides *continuous* antibacterial action against the infection factor. With exclusive, frequent use, pHisoHex builds up an effective antibacterial film on the skin that resists rinsing—lasts from wash to wash. pHisoHex augments any other therapy of acne.

When pHisoHex was used for washing by 42 patients with acne, "the results were uniformly encouraging. . . ."[1] "No patient failed to improve."[1]

pHisoHex cleans the skin of acne patients better than soap because it is forty per cent more surface active. It is a powerful emulsifier of oil, an action particularly beneficial in acne. Moreover, it cleans the orifices of the sebaceous glands, sweat glands and hair follicles more rapidly and more thoroughly than soap. pHisoHex lacks the potentially harmful qualities of soap. It is nonalkaline, nonirritating and hypoallergenic.[2]

For acne, prescribe pHisoHex—and get improved results.

pHisoAc® Cream dries, peels and masks lesions. Use it with pHisoHex washings to help prevent comedones, pustules and scarring. Contains colloidal sulfur 6 per cent, resorcinol 1.5 per cent and hexachlorophene 0.3 per cent.

pHisoHex is available in unbreakable squeeze bottles of 5 oz. and 1 pint—and in combination package with pHisoAc Cream.

1. Hodges, F. T.: *GP* 14:86, Nov., 1956.
2. Guild, B. T.: *Arch. Dermat.* 51:391, June, 1945.

Winthrop LABORATORIES
New York 18, N.Y.

(1665M)

1942 . . . NINETEENTH ANNIVERSARY . . . 1962

PROFESSIONAL BUSINESS MANAGEMENT, INC.

John C. Post, *President*

A Personal Service Designed to Assist the Doctor with the Business Side Of Medical Practice.

• *Medical Management Specialists* •

1000 20th Street, N.W. Tel. FEderal 8-3200

CAPITAL NURSE REGISTRY

(Est. 1910)

Undergraduate
Practical

Nurses
Recommended
by Physicians

All Nurses Have Had Hospital Training

24 Hour Telephone Service

One of Washington's outstanding Registries, serving physicians and surgeons since 1910

Licensed by District of Columbia

Your Patronage Solicited

Telephone

RAndolph 3-2600 or 3-1771

NURSES REGISTRY

EXPERIENCED UNDERGRADUATES & PRACTICAL NURSES

Recommended by Physicians
At Your Service for Day or Night Duty
In Washington and nearby area

CALL—RAndolph 6-6706

(A non-profit organization)

"We Make Business Possible"

MALLOREY OFFICE SUPPLY COMPANY

Commerical Stationers
Printing
Office Supplies • Engraving Office Furniture

732 9th Street, N.W.
Washington 1, D. C.
Republic 7-0414

THE LAUREL SANITARIUM LAUREL, MARYLAND

Geriatric Hospital
Buildings in centre of 122 acres.
ESTABLISHED 1905

Accommodations available for senile ambulatory women who need psychiatric care.

LICENSED FOR TREATMENT OF NERVOUS AND MENTAL DISEASES
Phone Parkway 5-1250—Jesse C. Coggins, M.D.—Medical Director

When treatment for
IMPOTENCE
is indicated
ANDROIDT.M. tablets
ANDROGEN-THYROID-COMBINATION

in two convenient dosage forms

ANDROID	**ANDROID-H.P.** (High Potency)
Each yellow tablet contains:	Each orange tablet contains:
Methyl Testosterone ....2.5 mg.	Methyl Testosterone ......5 mg.
Thyroid Ext. (1/6 gr.) ....10 mg.	Thyroid Ext. (1/2 gr.) ....30 mg.
Glutamic Acid ....50 mg.	Glutamic Acid ....50 mg.
Thiamine HCl ....10 mg.	Thiamine HCl ....10 mg.

INDICATIONS: **Impotence in male.**
AVERAGE DOSE: One tablet three times daily.
AVAILABLE: Bottles of 100 and 500 at your pharmacy.
CAUTION: Not to be used when testosterone is contra-indicated. Federal law prohibits dispensing without prescription.

1. *Methyltestosterone-Thyroid in Treating Impotence*, A. S. Titeff, *General Practice, Vol. 25, No. 2, February, 1962, pp. 6-8.*
2. *Thyroid-Androgen Relations*, L. Hellman, et al., *The Jrl. of Clin. Endocrinology and Metabolism, August 1959.*

Write for samples and literature...
BROWN **THE BROWN PHARMACEUTICAL COMPANY**
2500 West Sixth Street, Los Angeles 57, California

Westbrook
Sanatorium
RICHMOND, VIRGINIA

50th Anniversary
1911 - 1961

REX BLANKINSHIP, M.D.
President
JOHN R. SAUNDERS, M.D.
Medical Director
THOMAS F. COATES, JR., M.D.
Assistant Medical Director
JAMES K. HALL, JR., M.D.
Associate
R. H. CRYTZER
Administrator

A private psychiatric hospital employing modern diagnostic and treatment procedures—electro shock, insulin, psychotherapy, occupational and recreational therapy—for nervous and mental disorders and problems of addiction.

Brochure of Literature and Views Sent On Request
P. O. Box 1514 Phone EL 9-5701

KALORAMA CONVALESCENT HOME, INC.

Licensed by the D. C. Department of Licenses and Inspections

INSTITUTIONAL CARE

for the medical management of
the acute stages of alcoholism.

2001 KALORAMA ROAD
at 20th Street, N.W. Decatur 2-2681

THE FINEST
COSTS NO MORE

For over a hundred years the people of Washington have depended on Joseph Gawler's Sons in time of bereavement. Over the generations, Gawler's has built and maintained a tradition of service . . . reverent, fitting and beautiful. It has been our constant effort . . . our duty, to maintain the standard in which the finest families have placed their implicit trust.

a century of service

JOSEPH
GAWLER'S
SONS, INC.

FUNERAL DIRECTORS
1756 Pennsylvania Avenue, N.W.
(Just west of the White House)
Telephone: NAtional 8-5512

NATIONAL AND REGIONAL MEETINGS

September 1–4: College of American Pathologists. Palmer House, Chicago. Address: Dr. Arthur H. Dearing, *Executive Director*, Room 2115, Prudential Plaza, Chicago 1, Ill.

September 4–8: World Forum on Syphilis and Treponematoses. Sheraton-Park Hotel, Washington. Address: William Griggs, Communicable Disease Center, U. S. Public Health Service, Atlanta, Ga.

September 6–8: American Association of Obstetricians and Gynecologists. The Homestead, Hot Springs, Va. Address: Dr. Clyde L. Randall, *Secretary*, 100 Meadow Road, Buffalo 16, N. Y.

September 9–13: 13th Biennial Congress, International College of Surgeons. Waldorf-Astoria Hotel, New York. Address: 13th Biennial Congress Program, ICS, 1516 North Lake Shore Drive, Chicago 10, Ill.

September 9–15: 12th International Congress of Dermatology. Shoreham and Sheraton-Park Hotels, Washington. Address: Dr. Naomi M. Kanof, Chairman, Local Committee on Arrangements, 1150 Connecticut Avenue, N.W., Washington 6, D. C.

September 14: Maryland Medical and Chirurgical Faculty. Ocean City, Md. Address: Mr. John Sargeant, *Executive Secretary*, 1211 Cathedral Street, Baltimore, Md.

September 24–27: American Psychiatric Association. Americana Hotel, Bal Harbour, Fla. Address: Dr. Mathew Ross, *Medical Director*, 1700 18th Street, N.W., Washington 9, D. C.

October 1–4: 47th Annual Scientific Assembly of Interstate Postgraduate Medical Association. Palmer House, Chicago. Address: Dr. N. A. Hill, *Secretary*, Box 1109, Madison 1, Wisc.

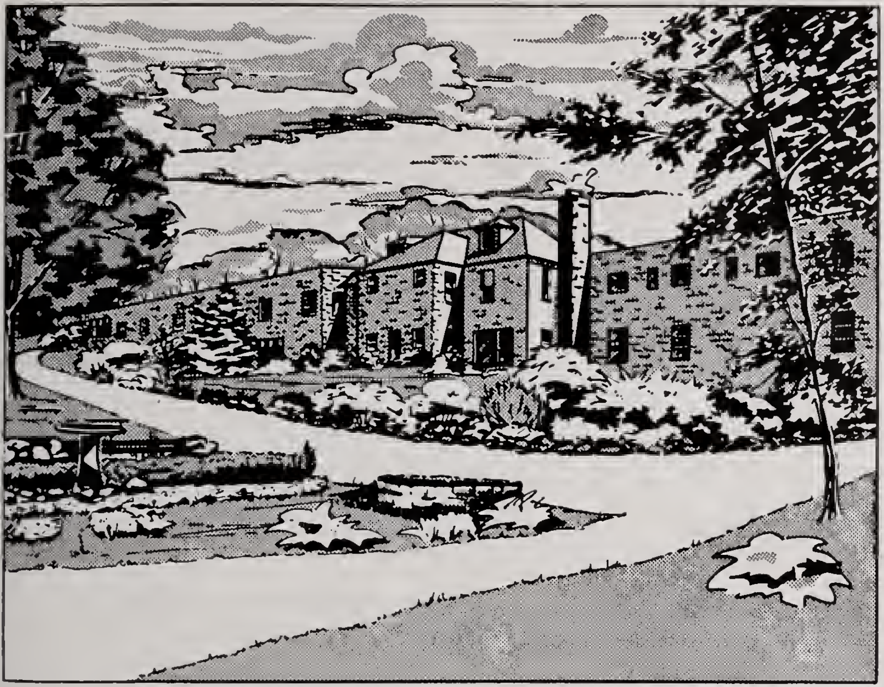
October 4–6: District IV, American College of Obstetricians and Gynecologists. Barringer Hotel, Charlotte, N. C. Address: Dr. Lawrence L. Hester, Jr., *District Secretary*, 55 Doughty Street, Charleston 16, S. C.

October 12–13: American Medical Writers Association. Sheraton-Park Hotel, Washington. Address: Dr. Robert J. Benford, President, Mid-Atlantic Chapter, 1411 K Street, N.W., Washington 5, D. C.

October 15–17: Second Interstate Scientific Assembly. Sheraton-Park Hotel, Washington. Address: Mr. Theodore Wiprud, 1718 M Street, N.W., Washington 6, D. C.

October 25–27: Divisional Meeting, American Psychiatric Association. Shoreham Hotel, Washington. Address: Dr. Norman Taub, 3900 Garrison Street, N.W., Washington 16, D. C.

November 11–14: Association of Military Surgeons of the United States. Mayflower Hotel, Washington. Address: Colonel Robert E. Bitner, Secretary, 1726 Eye Street, N.W., Washington 6, D. C.



"All the Comforts of Home" . . .

for

POST OPERATIVE
•
MEDICAL
•
CONVALESCENT
•
DIABETIC
•
PARALYTIC
•
INVALID
•
AGED
•
CHRONIC
•
AMBULATORY
•
RETIRED GUESTS, ETC.

★ A MEDICAL INSTITUTION UNDER THE SUPERVISION OF REGISTERED NURSES ★
LICENSED BY STATE AND COUNTY

KENSINGTON GARDENS SANITARIUM

AN ULTRA-MODERN HOME IN THE SUBURBS ON TEN ACRES
WITH A COUNTRY ATMOSPHERE

3000 McComas Avenue Kensington, Maryland

MEMBER OF

CARE OF THE AGED

MEMBER
AND MARYLAND NURSING HOME ASSOCIATION

- Rehabilitation Facilities
- Private and Semi-Private Rooms with Connecting Baths
- Beautifully Decorated
- Television in Spacious Lounges
- Large Porches
- Lovely Lawns and Shade Trees
- Supervised Diets
- Patients May Retain Their Own Physician
- 24-Hour Nursing Care
- Reasonable Rates
- Recreation and Physical Therapy

For Further Information Phone

LOckwood 5-2291 or LOckwood 5-0872

Proprietors-Administrators

LILLIAN H. and GEORGE L. BRICKER

THE MEDICAL ANNALS OF THE DISTRICT OF COLUMBIA is published by the Medical Society of the District of Columbia for the promulgation of information of scientific, general medical and personal interest.

Manuscripts for publication, news items, books for review, and correspondence relating to the editorial management should be sent to DR. WALLACE M. YATER, editor, MEDICAL ANNALS OF THE DISTRICT OF COLUMBIA, 1718 M Street, N.W., Washington 6, D. C.

Articles are accepted for publication on condition that they are contributed solely to this journal. Manuscripts must be typewritten, double spaced, and the original copy submitted. Photographs and drawings for illustrations must be carefully marked and show clearly what is intended. MEDICAL ANNALS will bear the cost of printing two cuts accompanying manuscripts submitted for publication. The cost of printing more than 2 cuts must be borne by the author.

Bibliographies should include the name of author (last name and initials), exact title of article, name of periodical, with volume, page, month (day of month in weekly), and year. References should be numbered consecutively in the order in which they appear in the text.

Matter appearing in the ANNALS is covered by copyright but, as a rule, no objection will be made to its reproduction in reputable medical journals, if proper credit is given. However, the reproduction for commercial purposes of articles appearing in the MEDICAL ANNALS OF THE DISTRICT OF COLUMBIA will not be permitted.

Reprints may be obtained at cost.

THE MEDICAL ANNALS OF THE DISTRICT OF COLUMBIA is published monthly. Subscription is included in the annual dues of members. To non-members the annual subscription price is: Domestic $4.50; Canadian, $5.00; foreign $5.50, including postage; single copies, fifty cents.

Checks, etc. should be made payable to the Medical Society of the District of Columbia.

Surgical Supplies and Equipment

Complete Fitting Service for
Ladies and Men

NELSON KLOMAN SURGICAL SUPPLY CO.
1018 - 18th Street, N.W
Washington 6, D. C.

***Telephone*: FEderal 8-5245**

PHYSICIAN SUPPLIES
ANATOMICAL SUPPORTS
HOSPITAL EQUIPMENT

Instruments
Blood Chemistry Reagents
Disposable Products
Anatomical Supports—Stockings
Wheel Chairs—Hospital Beds
Office Equipment—Colostomy Supplies
Call ASSCO for Fast Delivery

ACCREDITED SURGICAL SALES
3226 Wisconsin Ave., N.W. **EM 3-9595**
Washington, D. C.

THE GIBSON COMPANY

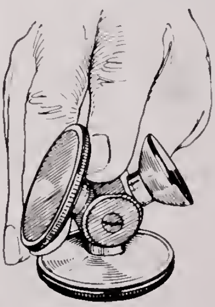
57 years serving the medical profession

Medical and Surgical Supplies
Hospital, Invalid and Sickroom Supplies
Physiotherapy Equipment
Surgical Fitting Specialists
Expert Medical Equipment Repair Service

1908 K Street, N.W. Federal 8-2688

BEUCHLER'S
915-19th Street, N.W. Republic 7-6006

DOCTOR: Here is a revolutionary masterpiece—
The Harvey-Cefaly Stethoscope



Superior auscultation
clearly detecting both low
and high frequencies

BETH-MONT
SURGICAL SUPPLY CO.
6811 Wisconsin Ave.
Bethesda,
Md.
Oliver 4-6200—4-6633

BOOK REVIEWS

Ciba Foundation Symposium on Renal Biopsy: Clinical and Pathological Significance. G. E. W. Wolstenholme, O.B.E., M.A., M.B., M.R.C.P., and Margaret P. Cameron, M.A., Editors for the Ciba Foundation. Price, $10.50. Pp. 395, with 134 illustrations. Boston: Little, 1962.

It is now ten years since Iversen and Brun published their experience with the first 42 successful biopsies of the kidney demonstrating the practicality and reasonable safety of the procedure. This volume is a transcript of the Symposium on the Clinical-pathologic Significance of Renal Biopsy, held March 14-16, 1961, under the auspices of the Ciba Foundation. The contributors represent a large segment of the world authorities on the clinical and pathologic aspects of kidney disease. The manuscripts describe pathologic findings by light and electron microscopy in a wide spectrum of renal disease, correlating these with clinical findings and physiologic data in many instances. Under the chairmanship of Dr. Arnold Rich, a very lively and stimulating discussion follows each manuscript. This gives the book a broader approach to each subject and makes the reading much more coherent. The general discussion at the end of this symposium includes topics such as the indication for renal biopsy and the complications of the procedure. Nowhere in the text, however, is the technic of renal biopsy described.

The scope of the book is wider than its title implies since it deals with the variety of diseases of the kidney that may be studied by renal biopsy rather than the procedure itself. It should serve as an excellent reference book for pathologists, internists with very particular interest in renal disease, and those engaged in research pertaining to the diseases of the kidney. The book is well illustrated and, with a European flavor, is well written.

John F. Maher, M.D.

Physical Diagnosis, 6th ed. Ralph H. Major, M.D., and Mahlon H. Delp, M.D. Price, $7.50. Pp. 355, with 527 illustrations. Philadelphia: Saunders, 1962.

The sixth edition of this standard text has been revised extensively. The chapters on the heart have been rewritten to include some of the more recent correlations between physical findings and physiologic events in the normal and diseased heart.

Perhaps as a sign of our times a brief but new section has been added on taking a neuropsychiatric history. New also are standard height and weight tables. The section on the examination of the eye has been enlarged with emphasis on neuroanatomy.

There are few typographical errors. The volume is profusely illustrated, as in prior editions. The palatability of the book is enhanced by the spicy seasoning of medical

(Continued on page 49)

COOK PRECAPS-ONE

ESSENTIAL PRENATAL DAILY VITAMIN AND MINERAL REQUIREMENTS

Each light red Precap-One contains:

		% MDR for pregnancy*
VITAMIN A	6000 units	150%
VITAMIN D	400 units	100%
THIAMINE (B_1)	1.5 mg.	150%
RIBOFLAVIN (B_2)	2.5 mg.	200%
VITAMIN C (Ascorbic Acid)	100 mg.	333%
NIACINAMIDE	15 mg.	150%
PYRODOXINE HCl	3 mg.	**
CALCIUM PANTOTHENATE	5 mg.	**
VITAMIN B_{12}	2 mcg.	**
FERROUS FUMERATE	132 mg. (44 mg. Fe)	289% (Fe)
CALCIUM CARBONATE	625 mg. (260 mg. Ca)	17% (Ca)

*Percentage of MDR for pregnancy based on one tablet daily.
**Need in human nutrition not yet established.

DOSAGE: For pregnant or lactating women, one tablet daily or as directed by a physician.

Price to your patient $4.10 per bottle of 100.

E. K. Cook & Co., Inc. BETHESDA, MARYLAND

CLASSIFIED ADVERTISEMENTS

Advertisements under the following headings are charged at the rate of $5.00 for one insertion of 50 words or less; $4.00 each for three insertions; and $3.00 each for six insertions or more. All advertisements are payable in advance; the Editorial Board reserves the right to edit copy. Closing date for new copy, 20th of month preceding date of issue.

Classified advertisements of a professional nature are free to members.

REAL ESTATE

FOR SALE: Custom-built house, 4635 Careybrook Lane, Oxon Hill, Md. (minutes from downtown): 75-foot brick rambler on 1 acre, wooded lot; 4 bedrooms, 2 baths, living room, dining room, kitchen, screened porch and garage; walk-out basement with huge, separate office or apartment, beautifully finished. Asking, $35,000. Telephone Cherry 8-7898.

FOR SALE OR RENT: Ideal house-office for doctor and family: centrally air-conditioned rambler with 4 bedrooms and full basement; front and back porches; beautiful, fenced yard and shrubs. Located on University Blvd. between Langley Park and Four Corners, Md. Telephone Juniper 8-8700.

FOR SALE: Cape Cod brick, 1½-story, in Temple Hills Village, S.E. Finished private apartment in attic, with private entrance. Large patio over garage, attached to house. Walk in basement with beautifully finished reception room, ample office space. Circular driveway; large parking area in rear. Price, $35,000. Telephone Logan 7-0545.

FOR SALE: Large house, including physician's office and well established practice, with or without medical equipment. All air-conditioned. Located at intersection of 16th Street and Military Road, N.W. Price, $45,000. Address Box 2, 1718 M Street, N.W. (6)

OFFICE SPACE AVAILABLE

TO SHARE: Will share office space with qualified internist or GP. Air-conditioned suite in new apartment building in a central, redeveloping area. Excellent potential. Address Box 13, 1718 M Street, N.W. (6)

FOR RENT: In-town 5-room office suite fully equipped; complete laboratory. Will rent by hour, day or part-time. Currently used by internist 20 hours week. New building, near George Washington Hospital. Parking spaces available. Address Box 24, 1718 M Street, N.W. (6)

TO SHARE: First floor offices, 600 sq. ft. Need for dermatologist, psychiatrist, orthopedist or neurosurgeon in densely populated suburban area. Rent, $80 month. Location: 1013 University Blvd. East, Langley Park, Md. Telephone 434-3388.

FOR RENT: Offices in Columbia Medical Building. Telephone Hobart 2-3032, evenings.

FOR RENT: Office suite at 1625 Massachusetts Avenue, N.W.: reception room, 2 private offices, 2 treatment rooms, approximately 950 sq. ft.; air-conditioned. One parking space. Reasonable rental. Telephone Hobart 2-4700 or Randolph 6-1644.

FOR RENT: New Medical Building, 1726 Eye Street, N.W.: one large suite, 1400 sq. ft., or may be subdivided. All utilities furnished including switchboard service. Central air-conditioning. Telephone Manager, National 8-2636.

FOR RENT: Parkwood Medical Building, 1746 K Street, N.W.: two-room suite, private entrance, large rooms. Available now. Telephone 296-4100, ext. 42.

TO SHARE: Offices in Silver Spring in new medical building on Spring Street. Fully furnished and equipped. Full-time nurse. Telephone 588-4820.

FOR RENT: Langley Park, Md., adjacent to busy shopping centers, 2 adjoining suites, about 1,000 sq. ft. each. Five doctors in building. Ideally located for ophthalmologist, EENT, orthodontist, internist, lawyer, accountant, etc. Reasonable. Some equipment available, e.g., examining table, etc. Telephone Woodley 6-6464.

MISCELLANEOUS

A GROUP OF PHYSICIANS who have overcome their alcohol problem will share their knowledge with their colleagues. All communications confidential. Address Box 50, 1718 M Street, N.W. (6) or telephone 526-6087 between 6 and 7 p.m.

"Cappy"

INTRODUCES THE WASHINGTON AREA SPECIALISTS *in collections for Professionals*

I'M
"Cappy"
an Old Fashioned girl with MODERN ideas about bill collecting . . .

Unless We Collect, There Is No Charge

We offer a complete collection service to bring about prompt payments in a dignified, diplomatic manner for those lacking adequate facilities for enforced collections.

'PHONE 882-2000

CAPITAL CREDIT CORP.

7600 GEORGIA AVENUE, N.W. WASHINGTON 12, D.C.

Book Reviews

(Continued from page 47)

history and frequent quotations from the masters of physical diagnosis, from Hippocrates to the present. The inclusion of articles from the recent literature helps to maintain this text as a standard in its field.

Ira N. Tublin, M.D.

W. B. SAUNDERS COMPANY features the following recent books in their full-page advertisement appearing elsewhere in this issue:

Kline and Lehmann—HANDBOOK OF PSYCHIATRIC TREATMENT IN MEDICAL PRACTICE

Tells the nonspecialist which psychiatric patients he should and should not treat—why he should treat them—and exactly how to manage these patients.

Finneson—DIAGNOSIS AND MANAGEMENT OF PAIN SYNDROMES

Step-by-step management of commonly met problems of pain—ranging from headache to intractable pain due to cancer.

Williamson—OFFICE PROCEDURES

Step-by-step instructions with over 1,000 illustrations on how to perform office techniques.

MAXWELL
AND
TENNYSON
PHARMACISTS

"Where Pharmacy is a Profession"

M+T

Washington, D. C.

1801 Eye Street	NAtional 8-0206
1835 Eye Street	REpublic 7-4600
1726 Eye Street	STerling 3-7077

Prescription called for and delivered without extra charge

Exclusive Distributor
Marcelle Cosmetics*
HYPO-ALLERGENIC
Chicago, Illinois

*Accepted for advertising in publications of the American Medical Association.

"Registered Nurses—For Private Duty"

U. S. EMPLOYMENT SERVICE
Professional Office

GRADUATE NURSES REGISTRY
1000 16th Street, N.W.
Washington 6, D. C.

CALL—DISTRICT 7-1129

24-hour telephone service—
7 days a week

THE
BIRTCHER MEDICAL DISTRIBUTORS
OF D. C.

Complete lines of
Physical and Hydrotherapy Equipment
Electro-Surgical Equipment
Electrocardiograph–Cardioscope–
Defibrillator and Heart Pacer

Distributors for:

PROFEXRAY X-RAY EQUIPMENT

A complete line of Radiographic and Fluoroscopic Equipment from the small Portable to 900 ma–150 KVP and superficial therapy. Also, most makes of X-ray accessories.

New and used equipment always in stock.

3314 M Street, N.W., Washington 7, D. C.
FEderal 3-2660

T. J. STRATTON

MEDICAL EQUIPMENT REPAIR SERVICE
Official factory service station for
many manufactures.

In the Chevy Chase Area
FOR THE BEST IN DRUGS AND SERVICE
IT'S

HIGGER'S

Complete Biological Stocks
Marcelle Hypo Allergenic Toiletries

HIGGER'S DRUGS, INC.
5015-17 Connecticut Avenue
Phone: Woodley 6-1815

a pair of cardiac patients:

Patients portrayed by professional models.

both are free of pain—but only one is on

DILAUDID®
(Dihydromorphinone HCl)

swift, sure analgesia normally unmarred by nausea and vomiting

DILAUDID provides unexcelled analgesia in acute cardiovascular conditions. Onset of relief from pain is almost immediate. The high therapeutic ratio of DILAUDID is commonly reflected by lack of nausea and vomiting—and marked freedom from other side-effects such as dizziness and somnolence.

● **by mouth** ● **by needle** ● **by rectum**
2 mg., 3 mg., and 4 mg.

May be habit forming—usual precautions should be observed as with other opiate analgesics.

KNOLL PHARMACEUTICAL COMPANY · ORANGE, NEW JERSEY

INDEX OF ADVERTISERS

Page

Bank
Riggs National Bank 4

Beverages
Coca-Cola Company 24

Books
W. B. Saunders Company 25

Business Counseling
Professional Business Management, Inc. 42

Collection Agencies
Capital Credit Corporation 48
Credit Bureau, Inc. 5

Diagnostic Equipment
Sanborn Company 38

Dietetic Products
Duffy-Mott Company 13
General Mills, Inc. 26
Jackson-Mitchell Pharmaceuticals, Inc. 17

Funeral Homes
Joseph Gawler's Sons, Inc. 44
S. H. Hines & Company 18

Insurance
Mutual of Omaha 3-C
Russell, Marsh & Kennedy, Inc. 24
St. Paul Fire & Marine Insurance Company 40

Nurse Registries
Association of Undergraduate and Practical Nurse Registry 42
Capital Nurse Registry 42
U. S. Employment Service for D. C. 49

Office Furniture and Supplies
W. D. Campbell Company 6
Mallorey Office Supply Company 42

Page

Pharmaceuticals
Ames Company 37
Bristol Laboratories 10–11
The Brown Pharmaceutical Company 43
Burroughs Wellcome and Company 14, 34
E. K. Cook & Company, Inc. 47
Charles C. Haskell & Company 52
Knoll Pharmaceuticals 50
Lederle Laboratories 7, 32
Thomas Leeming & Company, Inc. 27
Eli Lilly & Company 28
Organon, Inc. 21
Parke, Davis & Company 2-C, 3
Physicians Products Company 19
A. H. Robins Company 12, 35
Roche Laboratories 4-C
Sardeau, Inc. 8
Schering Corporation 31
G. D. Searle & Company 29
Smith, Kline & French Laboratories 15
E. R. Squibb & Sons 30
Upjohn Company 22
Wallace Laboratories 23, 39
Winthrop Laboratories 9, 33, 41

Pharmacies
Higger's Drugs 49
Maxwell & Tennyson 49
Peoples Drug Stores 16

Sanitariums
Kalorama Convalescent Home 44
Kensington Gardens Sanitarium 45
Laurel Sanitarium 42
Westbrook Sanatorium 43

Surgical Supplies
Accredited Surgical Sales 46
Beth-Mont Surgical Supply Company 46
Beuchler's, Inc. 46
Birtcher Medical Distributors of D. C. 49
Gibson Company 46
Nelson Kloman Surgical Supply Company 46

NEW!

Around the clock relief for

HAY FEVER DISTRESS

ISOCLOR® TIMESULE®

A NEW COMPREHENSIVE RELIEF

- **Relief usually starts in minutes**—to open nasal passages, stop running nose and eyes, sneezing, wheezing, itching and post-nasal drip
- **Relief usually lasts up to 12 hours** with a single oral dose
- **Gives both** upper respiratory decongestion and bronchodilatation to relieve chest discomfort
- **With minimal** drowsiness, CNS or pressor stimulation

Isoclor Timesule, actual size

MADE POSSIBLE BY THE NEW TIMESULE RELEASE MECHANISM

Schematic drawing of Timesule cell showing dialysis through permeable coating.

Release with the Isoclor Timesule is at a relatively even, constant rate, independent of gastrointestinal motility, pH, or enzymatic activity. Each Timesule pellet is actually a micro dialysis cell, consisting of a drug core with coating of dialyzing membrane of precisely controlled permeability. Approximately 20% of active drugs are released within one hour and 80% in 8 hours. Peaks and valleys of over-release and under-release are minimized for constant, controlled relief with minimum side effects.

EACH ISOCLOR TIMESULE CONTAINS:

Chlorpheniramine maleate	10 mg.
d-Isoephedrine HCL	65 mg.

In a special form providing prolonged therapeutic effect.

DOSE: Adults: One Timesule every 12 hours, or as directed.

WARNING: Use with caution in patients suffering from hypertension, cardiac disease, hyperthyroidism or diabetes. Patients susceptible to the soporific effect of chlorpheniramine should be warned against driving or operating machinery should drowsiness occur.

CHARLES C. HASKELL & COMPANY
Richmond, Virginia
DIV ARNAR-STONE LABORATORIES, INC.

IMPORTANT ANNOUNCEMENT

NOW -- A NEW PLAN OF INCOME PROTECTION INSURANCE DESIGNED TO SUPPLEMENT YOUR OFFICIAL D.C. MEDICAL SOCIETY PLAN.

OUTSTANDING FEATURES:

- ✓ LIFETIME BENEFITS FOR ACCIDENTS.
- ✓ UP TO AGE 65 FOR SICKNESS.
- ✓ SICKNESS BENEFITS DOUBLE AFTER 5 YEARS OF DISABILITY UP TO AGE 65.

Available only to members now carrying the Basic Plan, Policy Form LMN.

For additional details write or call:

Joseph E. Jones
102 Ring Building
1200 - 18th St. N. W.
Washington 6, D.C.

FEderal 8-3000

Mutual of Omaha

MUTUAL BENEFIT HEALTH
& ACCIDENT ASSOCIATION,
OMAHA, NEBRASKA

ANXIETY TENSION & THE LIBRIUM EFFECT

A patient treated with Librium feels different, even after a few doses. He appears different to his family and to his physician. Different, in the sense of a change from the previous state of anxiety and tension, and also freed from the sensations created by daytime sedatives or tranquilizers. That the striking difference in Librium was first observed in a series of ingenious animal experiments is mainly of theoretical interest. Of more practical importance, for example, is that Librium lacks any depressant effect—a fact which can assume overriding clinical importance. And this is but one of the ways in which the difference can be observed. Librium deserves to be studied at first hand. Why not select twelve of your patients who show the emotional or somatic signs of anxiety, tension, or agitation, place six of them on Librium—and see the difference in effect for yourself.

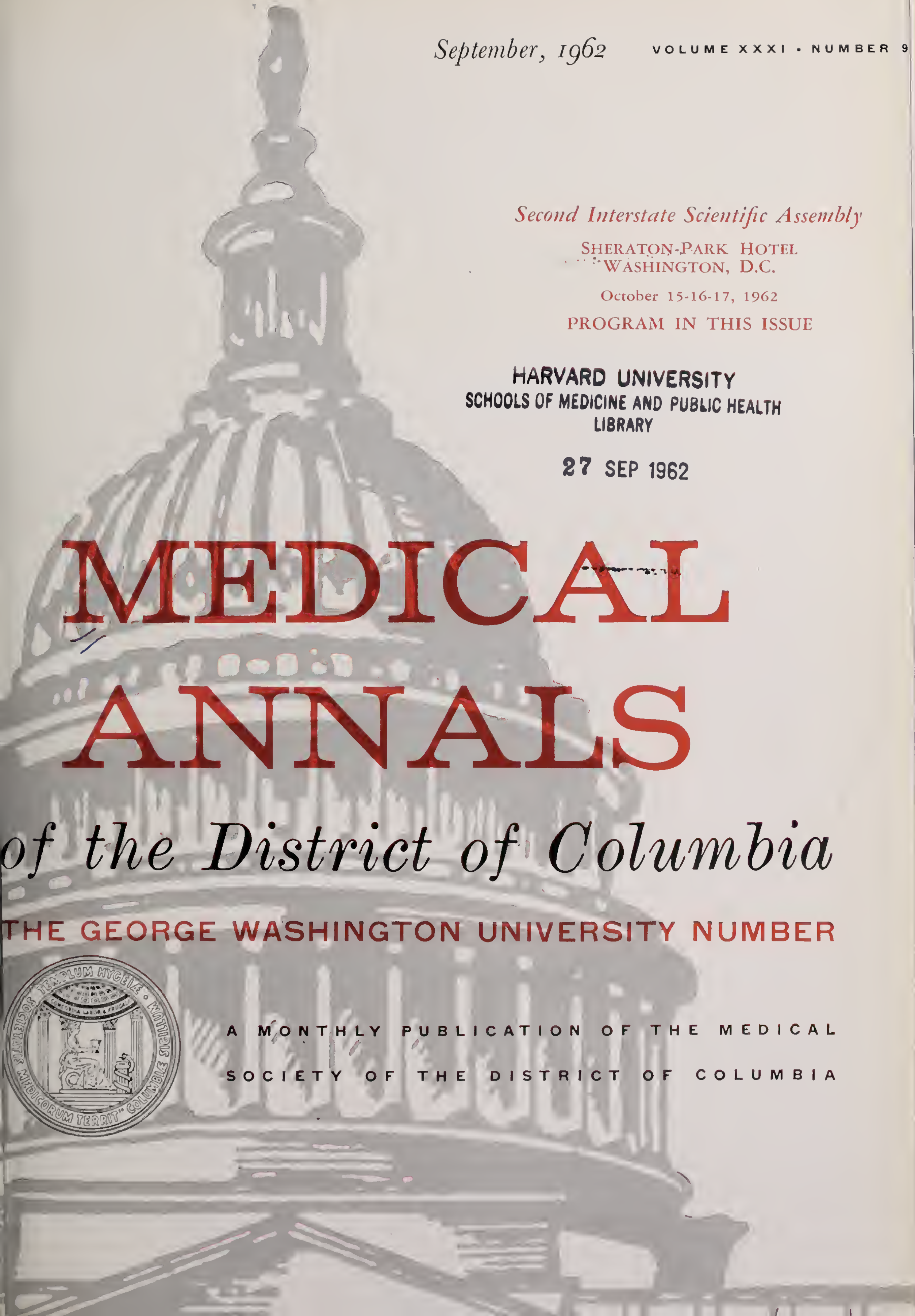
THE SUCCESSO
THE TRANQUIL

Consult literature and dosage in
available on request, before p

LIBRIUM® Hydrochloride—7-chloro-2-methyl
phenyl-3H-1,4-benzodiazepine 4-oxide hydroc

ROCHE
ROCHE
LABORATORIES
Division of Hoffmann-La Roche Inc.
Nutley 10, New Jersey

September, 1962 VOLUME XXXI • NUMBER 9



Second Interstate Scientific Assembly

SHERATON-PARK HOTEL
WASHINGTON, D.C.

October 15-16-17, 1962

PROGRAM IN THIS ISSUE

HARVARD UNIVERSITY
SCHOOLS OF MEDICINE AND PUBLIC HEALTH
LIBRARY

27 SEP 1962

MEDICAL ANNALS

of the District of Columbia

THE GEORGE WASHINGTON UNIVERSITY NUMBER

A MONTHLY PUBLICATION OF THE MEDICAL SOCIETY OF THE DISTRICT OF COLUMBIA

"Alone I walk the peopled city..."

DILANTIN®

(diphenylhydantoin, Parke-Davis)

helps the epileptic to lead a more fruitful life

"In a series of over 3,000 epileptics... DILANTIN alone or in combination with other drugs has been the sheet anchor in the management."[1] DILANTIN is the established anticonvulsant medication for a variety of reasons: • effective control of grand mal and psychomotor seizures[1-9] • oversedation is not a problem[2] • possesses a wide margin of safety[3] • low in incidence of side effects[3] • its use is often accompanied by improved memory, intellectual performance, and emotional stability.[10] DILANTIN (diphenylhydantoin, Parke-Davis) is available in several forms, including DILANTIN Sodium Kapseals,® 0.03 Gm. and 0.1 Gm., bottles of 100 and 1,000. Other members of the PARKE-DAVIS FAMILY OF ANTICONVULSANTS for grand mal and psychomotor seizures: PHELANTIN® Kapseals (Dilantin 100 mg., phenobarbital 30 mg., desoxyephedrine hydrochloride 2.5 mg.), bottles of 100. for the petit mal triad: MILONTIN® Kapseals (phensuximide, Parke-Davis) 0.5 Gm., bottles of 100 and 1,000, and Suspension, 250 mg. per 4 cc., 16-ounce bottles. CELONTIN® Kapseals (methsuximide, Parke-Davis) 0.3 Gm., bottles of 100. ZARONTIN® Capsules (ethosuximide, Parke-Davis) 0.25 Gm., bottles of 100.

REFERENCES: (1) Roseman, E.: *Neurology* **11**:912, 1961. (2) Bray, P. F.: *Pediatrics* **23**:151, 1959. (3) Chao, D. H.; Druckman, R., & Kellaway, P.: Convulsive Disorders of Children, Philadelphia, W. B. Saunders Company, 1958, p. 120. (4) Crawley, J. W.: *M. Clin. North America* **42**:317, 1958. (5) Livingston, S.: The Diagnosis and Treatment of Convulsive Disorders in Children, Springfield, Ill., Charles C Thomas, 1954, p. 190. (6) *Ibid.*: *Postgrad. Med.* **20**:584, 1956. (7) Merritt, H. H.: *Brit. M. J.* **1**:666, 1958. (8) Carter, C. H.: *Arch. Neurol. & Psychiat.* **79**:136, 1958. (9) Thomas, M. H., in Green, J. R., & Steelman, H. F.: Epileptic Seizures, Baltimore, The Williams & Wilkins Company, 1956, pp. 37-48. (10) Goodman, L. S., & Gilman, A.: The Pharmacological Basis of Therapeutics, ed. 2, New York, The Macmillan Company, 1955, p. 187.

This advertisement is not intended to provide complete information for use. Please refer to the package enclosure, medical brochure, or write for detailed information on indications, dosage, and precautions.

PARKE-DAVIS

PARKE, DAVIS & COMPANY, Detroit 32, Michigan

93362

The

RIGGS

NATIONAL BANK

of WASHINGTON, D. C.

FOUNDED 1836

LARGEST BANK IN THE NATION'S CAPITAL

COMPLETE BANKING AND TRUST SERVICE

RESOURCES OVER $500,000,000

MAIN OFFICE
1503 PENNSYLVANIA AVENUE, N.W.
(Opposite U. S. Treasury)

BRANCHES

FARMERS & MECHANICS
Wisconsin Ave. and M St., N.W.

DUPONT CIRCLE
1913 Massachusetts Ave., N.W.

PARK ROAD
14th St. and Park Rd., N.W

SEVENTH & EYE STREET
7th and Eye St., N.W.

NORTHEAST BRANCH
1348 4th St., N.E.

SEVENTH & D STREET
318 7th Street, N.W

NORTHWEST
1779 Columbia Rd., N.W.

FRIENDSHIP
Wisconsin Ave. and Warren St., N.W.

CHEVY CHASE
Conn. Ave. and Morrison St., N.W.

LINCOLN BRANCH
17th and H Sts., N.W.

WASHINGTON LOAN
AND TRUST BRANCH
F St. at 9th, N.W.

17th & G STREET
BRANCH
14th and G Sts., N.W.

•

FACILITY
WALTER REED ARMY MEDICAL CENTER

TRUST DEPARTMENT OFFICE
1508 H Street, Northwest

Member Federal Deposit Insurance Corporation • Member Federal Reserve System

MEDICAL ANNALS

of the District of Columbia

EDITORIAL OFFICE:
1718 M Street, N.W., Washington 6
Telephone DIstrict 7-3111

COPYRIGHT, 1962,
BY THE MEDICAL SOCIETY
OF THE DISTRICT OF COLUMBIA.
Yearly Subscription, $4.50
Single Number, 50¢

Second-class postage paid at Baltimore, Md.
Published monthly at
Mount Royal and Guilford Avenues,
Baltimore 2, Maryland

Contents for September

THE GEORGE WASHINGTON UNIVERSITY NUMBER

SCIENTIFIC ARTICLES

Cardiac Tamponade due to Pericardial Effusion. *Paul C. Adkins, M.D., and George A. Kelser, Jr., M.D.*, Washington 499

New Relief for Leukorrhea. *Thomas M. Leonard, M.D.*, Washington 506

Peritoneal Dialysis in the Treatment of Uremia. *Vincent R. Pateras, M.D., Mary F. Watt, M.D., Norman C. Kramer, M.D., Marshall H. Jacobson, M.D., and Alvin E. Parrish, M.D.*, Washington 510

Lung Function Tests in Diagnosis. *Harold M. Silver, M.D., and Yutaka Ohsaki, M.D.*, Washington 515

Perforation of Malignant Lesions of the Colon. *J. Richard Thistlethwaite, M.D., and Edward F. Cornwell, Jr., M.D.*, Washington 520

Osteopetrosis. *William B. McAvoy, M.D.*, Monongahela, Pa., *and William W. Stanbro, M.D.*, Washington 525

EDITORIALS

The New Medical Curriculum of The George Washington University 533

Dr. Annis and AMA 535

Volunteers for the Polio Immunization Report 535

Hospital Costs Continue to Rise 536

From Other Journals 536

(Continued on page 6)

Are You Really Different, DOCTOR?

ASSOCIATED CREDIT BUREAUS OF AMERICA, INC.
MEDICAL CREDITS DIVISION

It's an ironical fact that many patients feel doctors make so much money their bills can be neglected or even completely ignored. But these same patients buy automobiles, television sets, etc.

The doctor's office assistant can help prevent this by (1) checking a patient's record with THE CREDIT BUREAU, and (2) using COLLECTRITE SERVICE with those slow-pay patients.

Ask Mr. Kane
at NAtional 8-0680
for information.

PHYSICIANS AND DENTISTS ADJUSTMENT SERVICE

A Division of
The Credit Bureau, Inc.
Washington, D. C.

Contents for September

(*Continued*)

SPECIAL SECTION

Second Interstate Scientific Assembly 537

MISCELLANY

President's Page: The Truth, the Whole Truth, and Nothing But the Truth 532
AMA House of Delegates: A Report of D. C. Delegates 553
Cancer Page: Tumors in Children 554
Dr. Dodek Honored by Students' Society 555
Studies of Reiter's Syndrome and Chronic Myelogenous Leukemia 555
Meetings 556
Boards & Committees 557
Membership 558
General News 558
Personals 561
Obituaries 563
Book Reviews *Adv. 16*
Medical Annals Staff and Officers of Medical Society *Adv. 26*
Books Received *Adv. 55*
Classified Advertisements *Adv. 56*
National and Regional Meetings *Adv. 58*
Index of Advertisers *Adv. 61*

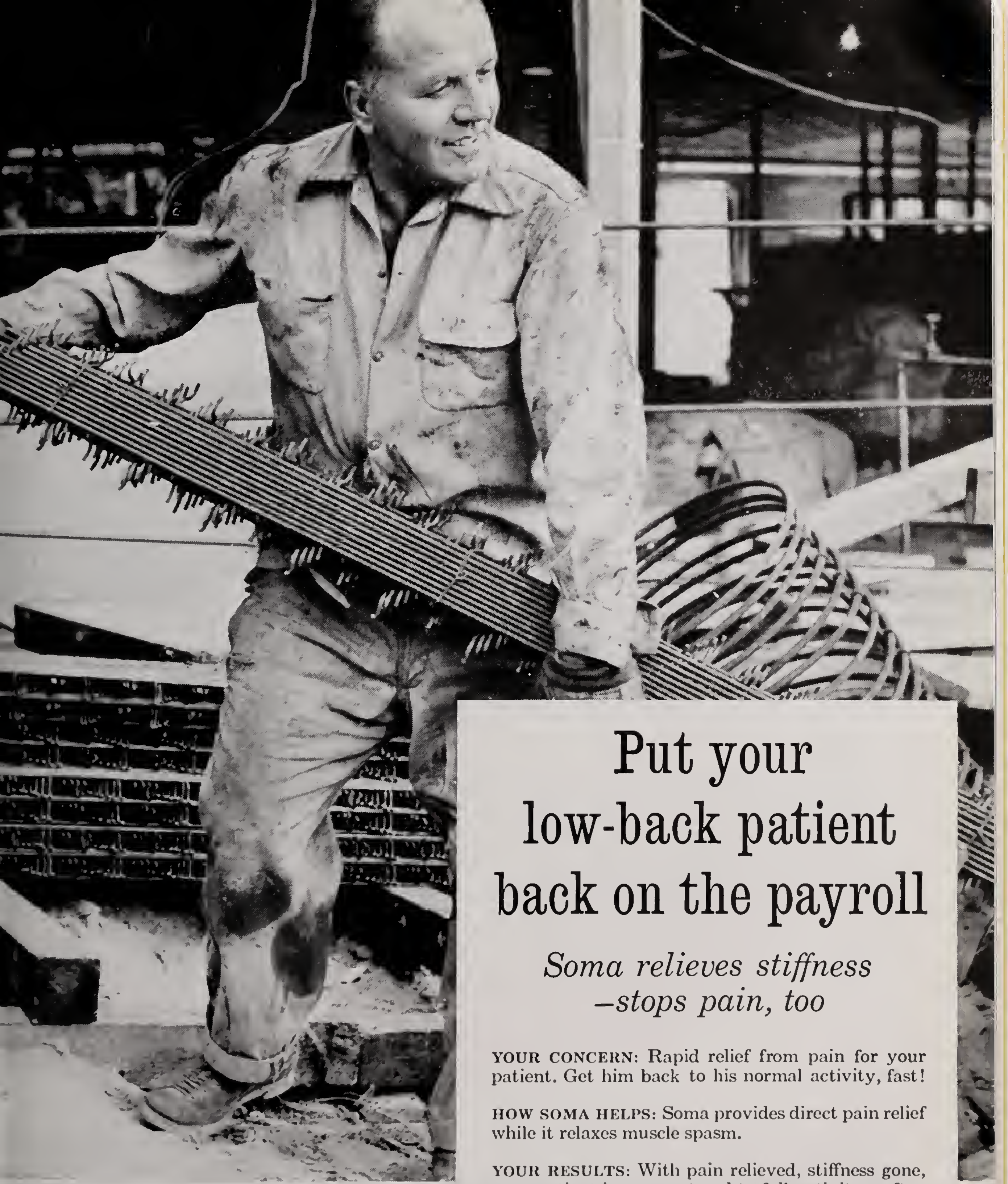
Specialists in Office PLANNING

The W. D. Campbell Company knows the fine points of business furniture and furnishings. It will pay you to call on our experienced planning and decorating service. No obligation on your part.

Put your problems in the creative hands of our experts.

Phone MEtro. 8-5660

The W. D. Campbell Company
WASHINGTON'S LEADING OFFICE FURNITURE SUPPLIERS, SINCE 1917
1014 Fifteenth Street, N.W. Washington 5, D. C.
Free parking in the building



Put your low-back patient back on the payroll

Soma relieves stiffness –stops pain, too

YOUR CONCERN: Rapid relief from pain for your patient. Get him back to his normal activity, fast!

HOW SOMA HELPS: Soma provides direct pain relief while it relaxes muscle spasm.

YOUR RESULTS: With pain relieved, stiffness gone, your patient is soon restored to full activity—often in days instead of weeks.

Kestler reports in controlled study: *Average time for restoring patients to full activity: with Soma, 11.5 days; without Soma, 41 days.* (*J.A.M.A. Vol. 172, No. 18, April 30, 1960.*)

Soma is notably safe. Side effects are rare. Drowsiness may occur, but usually only in higher dosages. Soma is available in 350 mg. tablets. USUAL DOSAGE: 1 TABLET Q.I.D.

he muscle relaxant with an independent pain-relieving action

SOMA®

(carisoprodol, Wallace)

Wallace Laboratories, Cranbury, New Jersey

from boutonneuse fever in Africa

Whether treating boutonneuse fever, bronchopneumonia, or a host of other infections, physicians throughout the world continue to rely on the effectiveness, relative safety, and exceptional toleration of Terramycin in broad-spectrum antibiotic therapy. This continuing confidence is based upon thousands of published clinical reports and successful experience in millions of patients. *The next infection you see will more than likely be "Terra-responsive."*

Science for the world's well-being® **(Pfizer)** PFIZER LABORATORIES Division, Chas. Pfizer & Co., Inc. New York 17, New York

IN BRIEF The dependability of Terramycin in daily practice is based upon its broad range of antimicrobial effectiveness, excellent toleration, and low toxicity. As with other broad-spectrum antibiotics, overgrowth of nonsusceptible organisms may develop. If this occurs, discontinue the medication and institute appropriate specific therapy as indicated by susceptibility testing. Glossitis and allergic reactions to Terramycin are rare. For complete information on Terramycin dosage, administration, and precautions, consult package insert before using.

More detailed professional information available on request.

Boutonneuse fever is a tick-borne, acute, febrile disease often affecting children. The bite site becomes a small, necrotic ulcer. A striking macular or maculopapular eruption develops on the trunk, palms and soles. Onset is sudden, with chills, high fever, violent headache and lassitude. The high temperature—up to 103° F.—characteristic of both boutonneuse fever and bronchopneumonia, drops rapidly following initiation of Terramycin therapy.

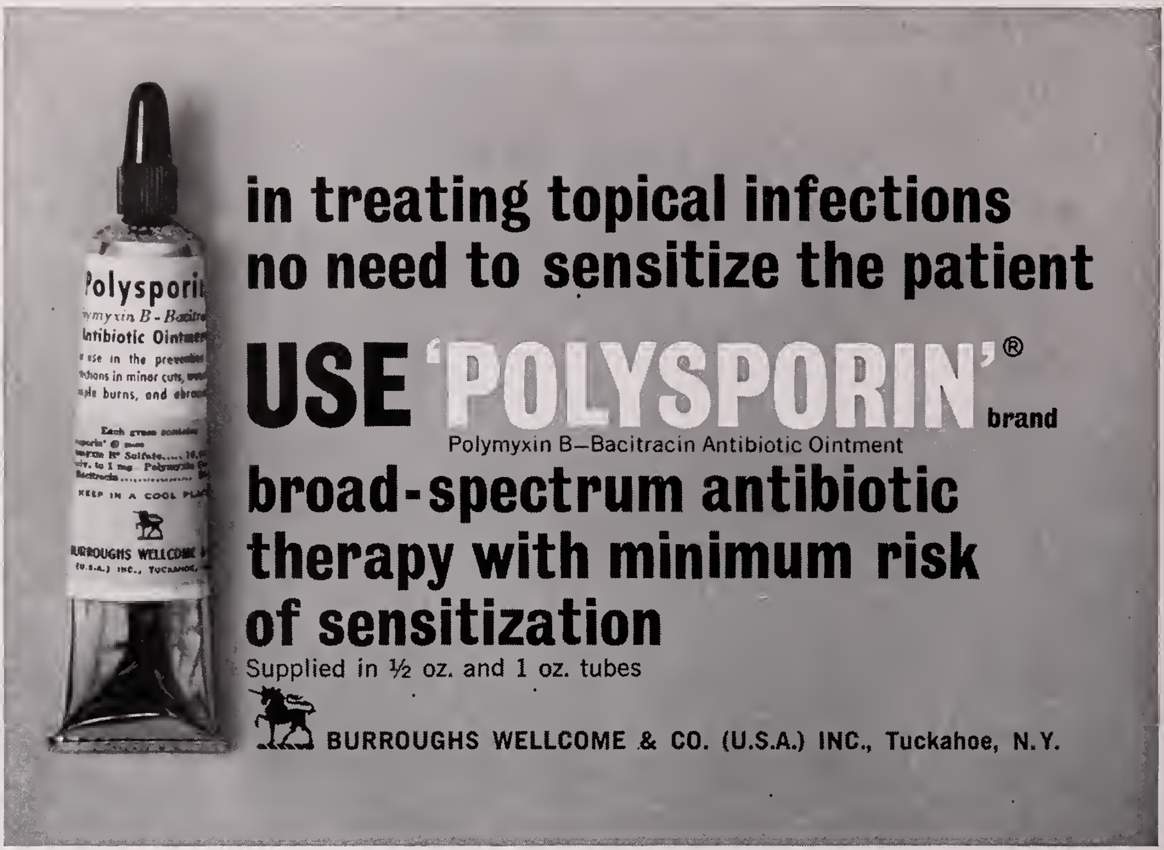
to bronchopneumonia in D. C.

BRAND OF OXYTETRACYCLINE

Terramycin® capsules · syrup · pediatric drops

intramuscular solution · intravenous

also available with nystatin as TERRASTATIN® (capsules and oral suspension)



in treating topical infections no need to sensitize the patient

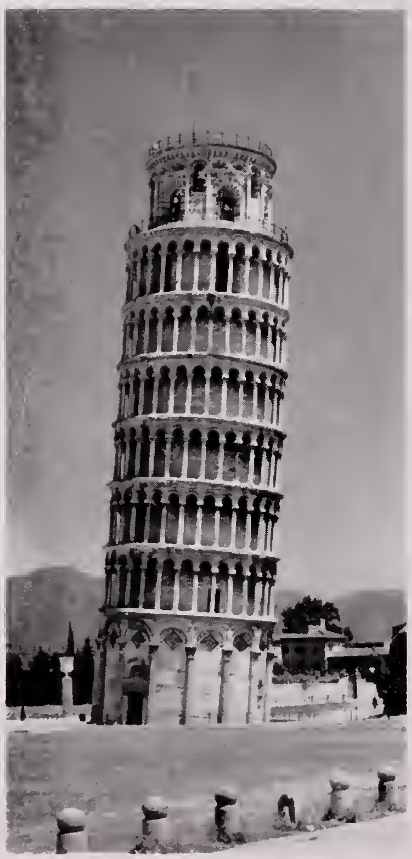
USE 'POLYSPORIN'® brand

Polymyxin B—Bacitracin Antibiotic Ointment

broad-spectrum antibiotic therapy with minimum risk of sensitization

Supplied in ½ oz. and 1 oz. tubes

BURROUGHS WELLCOME & CO. (U.S.A.) INC., Tuckahoe, N.Y.



When treatment for

IMPOTENCE

is indicated

ANDROIDT.M. **tablets**

ANDROGEN-THYROID-COMBINATION

in two convenient dosage forms

ANDROID	**ANDROID-H.P.** **(High Potency)**
Each yellow tablet contains:	Each orange tablet contains:
Methyl Testosterone ....2.5 mg.	Methyl Testosterone ......5 mg.
Thyroid Ext. (1/6 gr.) ....10 mg.	Thyroid Ext. (1/2 gr.) ....30 mg.
Glutamic Acid ....50 mg.	Glutamic Acid ....50 mg.
Thiamine HCl ....10 mg.	Thiamine HCl ....10 mg.

INDICATIONS: Impotence in male.

AVERAGE DOSE: One tablet three times daily.

AVAILABLE: Bottles of 100 and 500 at your pharmacy.

CAUTION: Not to be used when testosterone is contra-indicated. Federal law prohibits dispensing without prescription.

1. *Methyltestosterone-Thyroid in Treating Impotence*, A. S. Titeff, *General Practice, Vol. 25, No. 2, February, 1962, pp. 6-8.*
2. *Thyroid-Androgen Relations*, L. Hellman, et al., *The Jrl. of Clin. Endocrinology and Metabolism, August 1959.*

Write for samples and literature...

BROWN THE BROWN PHARMACEUTICAL COMPANY

2500 West Sixth Street, Los Angeles 57, California

asthma attack averted
. . . in minutes

patient protected
. . . for hours

Nephenalin®
(the dual-action anti-asthmatic tablet)

. . . works with nebulizer speed—provides four-hour protection

One NEPHENALIN tablet provides: *air in a hurry*—through sublingual isoproterenol HCl, 10 mg. *air for hours*—through theophylline, 2 gr.; ephedrine, ⅜ gr.; phenobarbital, ⅛ gr.
Dosage: Hold one NEPHENALIN tablet under the tongue for five minutes to abort the asthmatic attack promptly. Then swallow the tablet core for four full hours' protection against further attack. Only one tablet should be taken every four hours. No more than five tablets in 24 hours.
Supplied: Bottles of 50 tablets. For children: NEPHENALIN Pediatric, bottles of 50 tablets.
Caution: Do not administer NEPHENALIN with epinephrine. The two medications may be alternated at 4-hour intervals. NEPHENALIN should be administered with caution to patients with hyperthyroidism, acute coronary disease, cardiac asthma, limited cardiac reserve, acute myocardial damage, and to those hypersensitive to sympathomimetic amines. Phenobarbital may be habit forming. THOS. LEEMING & CO., INC., New York 17, N.Y.

For your elderly patients...

an effective GERIATRIC antiarthritic with distinctive Safety Factors

When arthritis afflicts the elderly, it often poses a critical problem in the choice of an effective antiarthritic that will not aggravate other common geriatric conditions . . . such as osteoporosis, hypertension, edema, hyperglycemia, peptic ulcer, renal, cardiac or hepatic damage, latent chronic infection, or emotional instability.

Pabalate-SF, the geriatric antiarthritic, is specially indicated for such patients.

As Ford and Blanchard have reported,[1] Pabalate-SF has "a pronounced antirheumatic effect in the majority of patients with degenerative joint diseases." It produces "a more uniformly sustained [salicylate blood] level for prolonged analgesia and, therefore, is superior to aspirin in the treatment of chronic rheumatic disorders."

Yet Pabalate-SF is marked by distinctive safety factors: its potassium salts cannot contribute to sodium retention . . . its enteric coating assures gastric tolerance . . . and its clinical record reflects none of the serious reactions frequently precipitated by therapy with corticosteroids or pyrazolone derivatives. **It has no contraindications except personal idiosyncrasy.**

[1] Ford, R. A., and Blanchard, K.: Journal-Lancet 78:185, 1958

Formula: In each persian-rose enteric-coated tablet: potassium salicylate 0.3 Gm., potassium para-aminobenzoate 0.3 Gm., ascorbic acid 50.0 mg.

Also available:
PABALATE, when sodium salts are permissible.
PABALATE-HC, for conservative steroid therapy.

A. H. ROBINS CO., INC. • Richmond, Virginia

Robins

Pabalate®-SF

–the new, convenient way to prescribe **PABALATE-SODIUM FREE**

arthritis — and osteoporosis
arthritis — and hypertension
arthritis — and hyperglycemia
arthritis — and cardiac insufficiency

NTZ Nasal Spray gives prompt, dependable decongestion of the nasal membranes for fast symptomatic relief of hay fever. The first spray shrinks the turbinates, restores nasal ventilation and stops mouth breathing. The second spray, a few minutes later, improves sinus ventilation and drainage. Excessive rhinorrhea is reduced.

NTZ is more than a simple vasoconstrictor. It contains Neo-Synephrine® HCl 0.5%—the efficacy of which is unexcelled—to shrink nasal membranes and provide inner space; Thenfadil® HCl 0.1% for potent topical antiallergic action; and Zephiran® Cl 1:5000 (antibacterial wetting agent) to promote the spread of the decongestant components to less accessible nasal areas. NTZ is well tolerated and does not harm respiratory tissues.

NTZ Nasal Spray also provides decongestive relief for head colds, perennial rhinitis and sinusitis. Supplied in leakproof, pocket-size, squeeze bottles of 20 ml. and in bottles of 30 ml. with dropper.

helps hay fever patients
forget the "season"

NTZ® Nasal Spray

Winthrop
LABORATORIES
New York 18, N. Y.

NTZ, Neo-Synephrine (brand of phenylephrine), Thenfadil (brand of thenyldiamine) and Zephiran chloride (brand of benzalkonium chloride, refined)

in fractures: vitamins are therapy

Few factors are more fundamental to tissue and bone healing than nutrition. Therapeutic allowances of B and C vitamins are important for rapid replenishment of vitamin reserves which may be depleted by the stress of fractures. Metabolic support with STRESSCAPS is a useful adjunct to an uneventful recovery. Supplied in decorative "reminder" jars of 30 and 100.

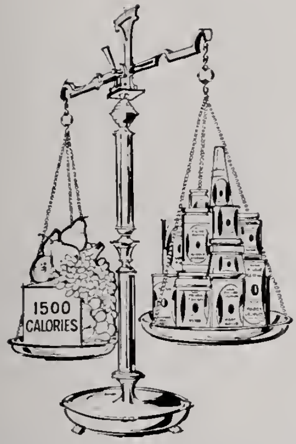
Each capsule contains:	
Vitamin B_1 (Thiamine Mononitrate)	10
Vitamin B_2 (Riboflavin)	10
Niacinamide	100
Vitamin C (Ascorbic Acid)	300
Vitamin B_6 (Pyridoxine HCl)	2
Vitamin B_{12} Crystalline	4 m
Calcium Pantothenate	20

Recommended intake: Adults, 1 capsule
or as directed by physician, for the trea
of vitamin deficiencies.

LEDERLE LABORATORIES, A Division of AMERICAN CYANAMID COMPANY, Pearl River, N.Y.

STRESSCAPS®

Stress Formula Vitamins Lederle



A new answer to one of America's leading health problems

60 DELICIOUS FOODS THAT MAKE WEIGHT CONTROL EASIER!

Here is a practical and down-to-earth method to help overcome obesity, the nation's No. 1 diet problem—and prime stealer of doctor's consultation time. Now a new group of 60 delicious Mott's Figure Control Food products uses the best of nutrition knowledge to create quality dishes, lower in calories by an average of 50%. Indicated calorie savings can be made pleasantly and accurately while eating normal-size portions by using these calorie-controlled foods in place of higher calorie dishes. Protein, vitamin and mineral food values are retained.

Low carbohydrate, low fat: Fats are largely extracted from meats and poultry in a way that cannot be done at home. Sauces and dressings are prepared with a high proportion of non-fat milk solids, vegetable colloids, all are delectably "natural" and tempting in flavor. Fruits, juices, desserts and sauces are prepared where indicated with non-caloric sweeteners—natural fruit values are intact, extra sugars reduced. The carbohydrate, protein and fat content appears on all labels along with the calorie count. Useful for diabetic diets, too.

Easy medical tool for doctors: Less need for drugs, no possible dangerous side effects, not even temporary dislocation of meal patterns. Figure Control Foods include: Soups, Meats & Poultry, Popular Sauces, Salad Dressings, Preserves, Syrup, Fruits, Drinks, Desserts and Sweeteners.

New Mott's Figure Control® Foods offer Good Eating at Half the Usual Calories

	Quantity	Figure Control Calories	"Regular" Food Calories
Apple-Grape Drink	½ cup	20	52
Five-Fruit Juice Breakfast Drink	½ cup	20	52
Braised Beef and Vegetables	6½ oz.	184	380
Meat Balls in Brown Gravy	3½ oz.	84	280
Chopped Chicken Livers	1 oz.	31	100
Chicken a la King	3 oz.	72	230
French Style Dressing	1 tbsp.	10½	60
Brown Gravy	1 tbsp.	7	21

	Quantity	Figure Control Calories	"Regular" Food Calories
Applesauce	½ cup	48	90
Fruit Cocktail	½ cup	44	90
Cherry Pie Filling	1 oz.	20	60
Chocolate Topping	1 tbsp.	8	63
Preserves (Peach, Strawberry)	1 tbsp.	9	55
"Maplette" Syrup	1 tbsp.	9	55
Liquid or Powder Sweetener	(to equal 1 tbsp. of sugar)	0	16

MOTT'S FIGURE CONTROL
BEEF SLICES
TOMATO SOUP
LOW CALORIE
PEACHES
VEGETABLE JUICE COCKTAIL
SPAGHETTI SAUCE

Complete menus, recipes, calorie chart available for professional distribution, with weight control guides you can distribute with confidence: all menus meet N.R.C. Recommended Daily Allowances. **Use this handy order form:**

FIGURE CONTROL FOODS
Duffy-Mott Company
370 Lexington Avenue
New York 17, New York

Please send____free copies of YOUR WEIGHT CONTROL PLAN for use with patients.

Dr.________________________

Address:____________________

City:____________Zone:____State:____

BOOK REVIEWS

Current Diagnosis and Treatment. Henry Brainerd, M.D., Sheldon Margen, M.D., Milton J. Chatton, M.D., and Associate Authors. Price, paper, $8.50. Pp. 758. Los Altos, Calif.: Lange, 1962.

This is a textbook of general medicine which the authors state is intended primarily as a desk reference but ". . . is in no sense intended to be used as a substitute for a comprehensive textbook of medicine." This appears to be a paradox, since a comprehensive text makes an ideal desk reference.

An addition to the growing list of Lange Medical Publications, this copious "paperback" has a now familiar format. The material is briefly reported and aimed at the high spots. It is factual; discussion is left to a minimum. Although there are no photographs, a number of charts and a few graphic illustrations are included. While most of the subject matter is authoritatively covered, one suspects that a few authors have had little personal experience with the disease entity being described.

Unfortunately, there are many faults. The overall impression is that this is a rather hurried and careless job. In an effort to be all-inclusive, which this book is not, many entities receive little more than a dictionary description. Some diseases are listed in a differential diagnosis but are nowhere defined. The index is inadequate. The presence of a chapter on obstetrics and gynecology seems pointless.

Oversimplification best describes this book. Little wonder it has already been observed in the hands of some medical students. This short-cut medicine is definitely not the brand to feed immature medical minds. Perhaps the authors did not intend this book for the medical student-house officers, but I venture to guess that here the appeal will be greatest.

It is difficult to believe that there is a definite need for publishing a book of this sort. Its bulk is not much less than that of the standard text, and there is so much less unrestrictive information.

Robert T. Kelley, M.D.

Pediatric Diagnosis, 2nd ed. Morris Green, M.D., and Julius B. Richmond, M.D. Price, $13.00. Pp. 541. Philadelphia: Saunders, 1962.

The second edition of this book, which first appeared in 1954, has been considerably expanded and many sections extensively revised. The result is impressive. The authors appear to have made every attempt to keep it current and have incorporated a large amount of material first appearing in the medical literature in the past two to three years.

While this reviewer must confess a certain bias against a book favoring a "push-button" approach to diagnosis, this book is much more than that. About half is given over to a description of the proper techniques of a pediatric history and physical examination plus a systematic presentation of abnormalities, major and minor, of the various body parts. Included also are the changes occurring in the developing child; particularly valuable is a fine chapter on developmental neurology (neuromuscular growth) written in conjunction with Dr. Sally Provence of the Yale University Child Study Center.

The large middle section of the book is given over to the familiar standard presentation of major signs and symptoms and what they may mean. Discussion of any disease is presented in capsule (but not outline) form. The basic defect of such an approach is largely overcome by the considerable number of references for each immediately following the discussion in the text. Other authors, please copy. A final short section (in many ways the book's best) deals with the health supervision of the child from birth through adolescence and is of major value for the philosophy it propounds. These are indeed authors who love and care about children.

The book suffers from its almost complete lack of illustrations; this, however, is more likely a function of production costs than intent. There is a good index and an appendix containing the standard Stuart-Stevenson growth tables.

When used, as the authors suggest, as a complement to conventional pediatric textbooks, this book will be a useful addition to the medical library of any physician who sees children, just as much for the approach it recommends as for the information it contains.

J. Wm. Oberman, M.D.

Drugs of Choice 1962–1963. Walter Modell, M.D., Editor. Price, $14.50. Pp. 941, with 46 tables. St. Louis: Mosby, 1962.

Recommended for desk use for physicians in all specialties and for hospital libraries, this third edition presents current revisions, and changes in contributors and in its format. Edited by Dr. Modell, Associate Professor and Director of Clinical Pharmacology, Cornell University Medical College, it contains contributions by 47 eminent physicians. It is designed as a comprehensive source of authoritative, up-to-date opinions on drug therapy. As Dr. Modell aptly comments, unfavorable first impressions of a drug often arise from ignorance of its uses, limitations and dangers, thus leading to enduring prejudice with failure to employ the drug when it is indicated.

The policy of changing authorship of a few chapters, particularly on controversial subjects, with each new

(Continued on page 18)

for the
tense
and anxious
patient . . .

Sustained tranquilization without autonomic side reactions

- SAFE, CONTINUOUS RELIEF of anxiety and tension for 12 hours with just one capsule—without causing autonomic side reactions and without impairing mental acuity, motor control or normal behavior.
- ECONOMICAL for the patient—daily cost is only a dime or so more than for barbiturates.

Meprospan®-400

400 mg. meprobamate (Miltown®) sustained-release capsules

Usual dosage: One capsule at breakfast lasts all day; one capsule with evening meal lasts all night

Available: *Meprospan-400*, each blue-topped capsule contains 400 mg. Miltown (meprobamate).
Meprospan-200, each yellow-topped capsule contains 200 mg. Miltown (meprobamate). Both potencies in bottles of 30.

WALLACE LABORATORIES/*Cranbury, N. J.*

Book Reviews

(*Continued from page 16*)

edition (alternate years) introduces four new contributors as follows: Dr. Rachmiel Levine and Dr. Morton Smith (Antidiabetic Agents), Dr. Leroy Vandam (Drugs in Arterial Hypotension and Shock), Dr. Dewey Zeigler (Anticonvulsants), and Dr. J. Weldon Bellville (Antiemetic Agents). In general, each chapter contains a discussion of clinical conditions in which applicable drugs are used, a consideration of several drugs, and data which may make one or another more desirable. Cross reference is kept at a minimum, but some repetition is present for convenience. As in the last edition, a single, alphabetically arranged Drug Index appears at the end of the book. This includes drugs not discussed in the general subject index, is comprehensive, and lists trade names. The improved format in this new edition includes a list of tables and also a Drug Directory, the latter heading each chapter and including chapter page references.

The popular acceptance of the previous editions, the scope of the text, and the many excellent contributions prohibit reporting on the merits or deficiencies of individual chapters. In general, toxic effects of drugs and contraindications to their uses are inadequately discussed. The chapter on internal hemostasis is particularly well presented. The sub-specialist may feel his own field inadequately covered but will find an adequate bibliography, and also rewarding subject matter in other fields. The chapter on Sedatives and Tranquilizers for Psychiatric Disorders has been deleted, having been considered as too highly specialized. However, this category of drugs is included in another chapter, making the book a necessity for the psychiatrist with his ever-increasing need of knowledge in pharmacology.

Misuse and abuse of drugs by the patient and the physician continue to be a serious problem. Bizarre reactions to drugs, often attributed to some perversity of the patient, may indeed reflect the physician's failure to assess the therapeutic problem diagnostically or to use the appropriate drug or combination of drugs properly. In the avoidance or control of undue and undesirable drug effects, the compounding of diagnostic confusion, and the economic wastefulness of incorrect medication and countermedication, this book is considered an indispensable supplement to other generally used references on drug therapy.

Virginia P. Beelar, M.D.

Early Detection and Diagnosis of Cancer. Walter E. O'Donnell, M.D., Emerson Day, M.D., F.A.C.P., and Louis Venet, M.D., F.A.C.S. Price, $12.00. Pp. 286, with 82 figures and 3 color plates. Drawings by Shirley Baty. St. Louis: Mosby, 1962.

Assuming that the attitude of the physician is the most important single element necessary for the detection of malignant diseases, the authors have written a comprehensive guide to the practical diagnosis of cancer —diagnosis which can be accomplished in the physician's office.

There are 11 chapters. Chapter II outlines the cancer detection examination. Starting with the skin, the remainder of the chapters deal with the most common sites of cancer in their order of frequency and in their accessibility for diagnosis.

The material is presented in a semi-outline, didactic fashion. It makes for easy reading and ready reference. The illustrations are well done and of great aid visually in understanding the procedure being outlined.

This book is directed at the practicing physician who wants finger-tip information about the best and most reliable diagnostic procedures available for the detection of cancer.

It is not and does not purport to be a treatise on cancer. There are no references, with the exception of a short bibliography at the end of the book.

It is an excellent book which will serve the physician well in the conduct of his daily practice.

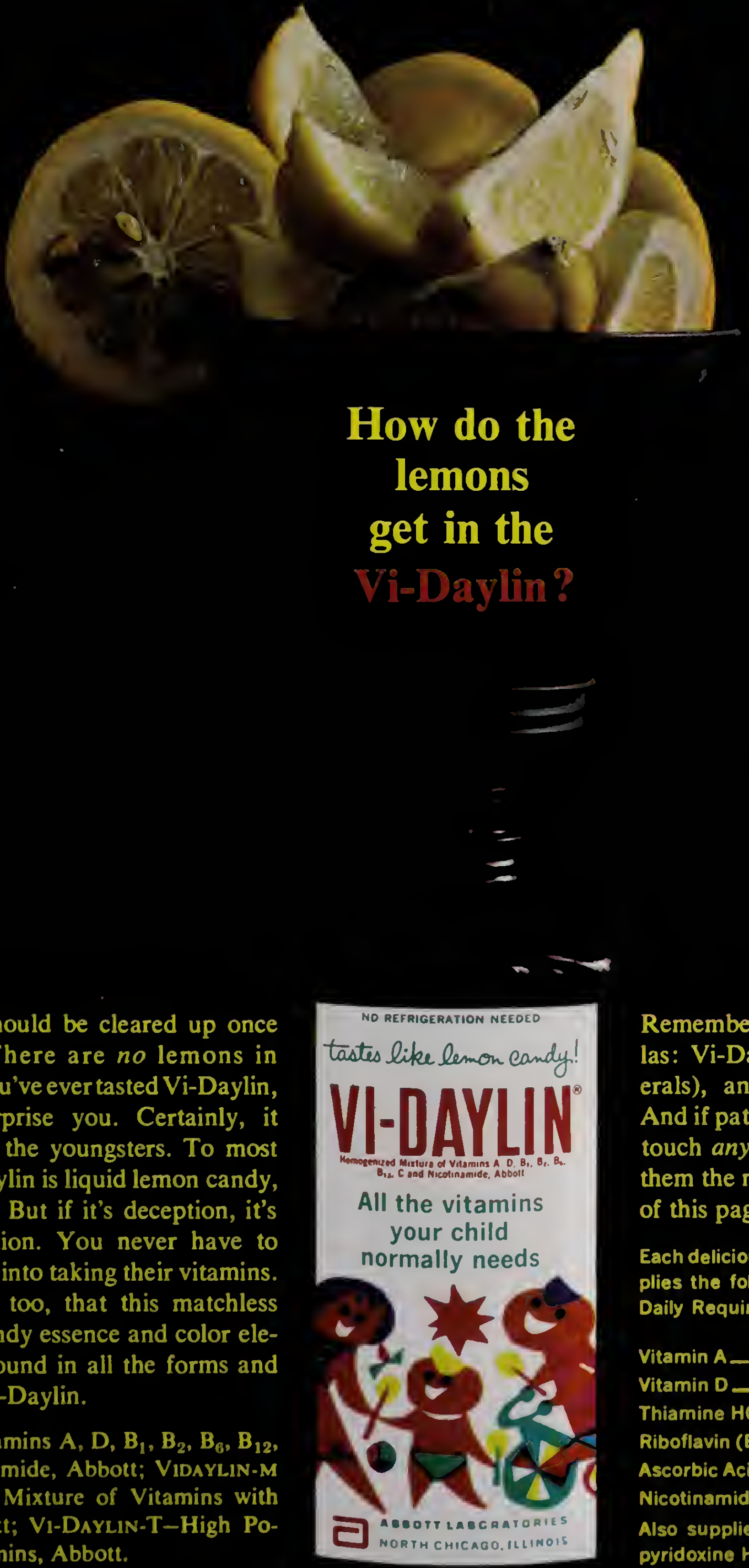
Franklin T. Brayer, M.D.

AMEF

A Symbol
to Support . . .

American Medical
Education Foundation
535 N. Dearborn St., Chicago 10, Ill.

How do the lemons get in the Vi-Daylin?


NO REFRIGERATION NEEDED
tastes like lemon candy!
VI-DAYLIN®
Homogenized Mixture of Vitamins A, D, B₁, B₂, B₆, B₁₂, C and Nicotinamide, Abbott
All the vitamins your child normally needs
ABBOTT LABORATORIES
NORTH CHICAGO, ILLINOIS

Perhaps this should be cleared up once and for all. There are *no* lemons in Vi-Daylin. If you've ever tasted Vi-Daylin, this might surprise you. Certainly, it would surprise the youngsters. To most of them, Vi-Daylin is liquid lemon candy, and that's *that*. But if it's deception, it's sensible deception. You never have to badger the kids into taking their vitamins. Nice to know, too, that this matchless matching of candy essence and color elegance can be found in all the forms and formulas of Vi-Daylin.

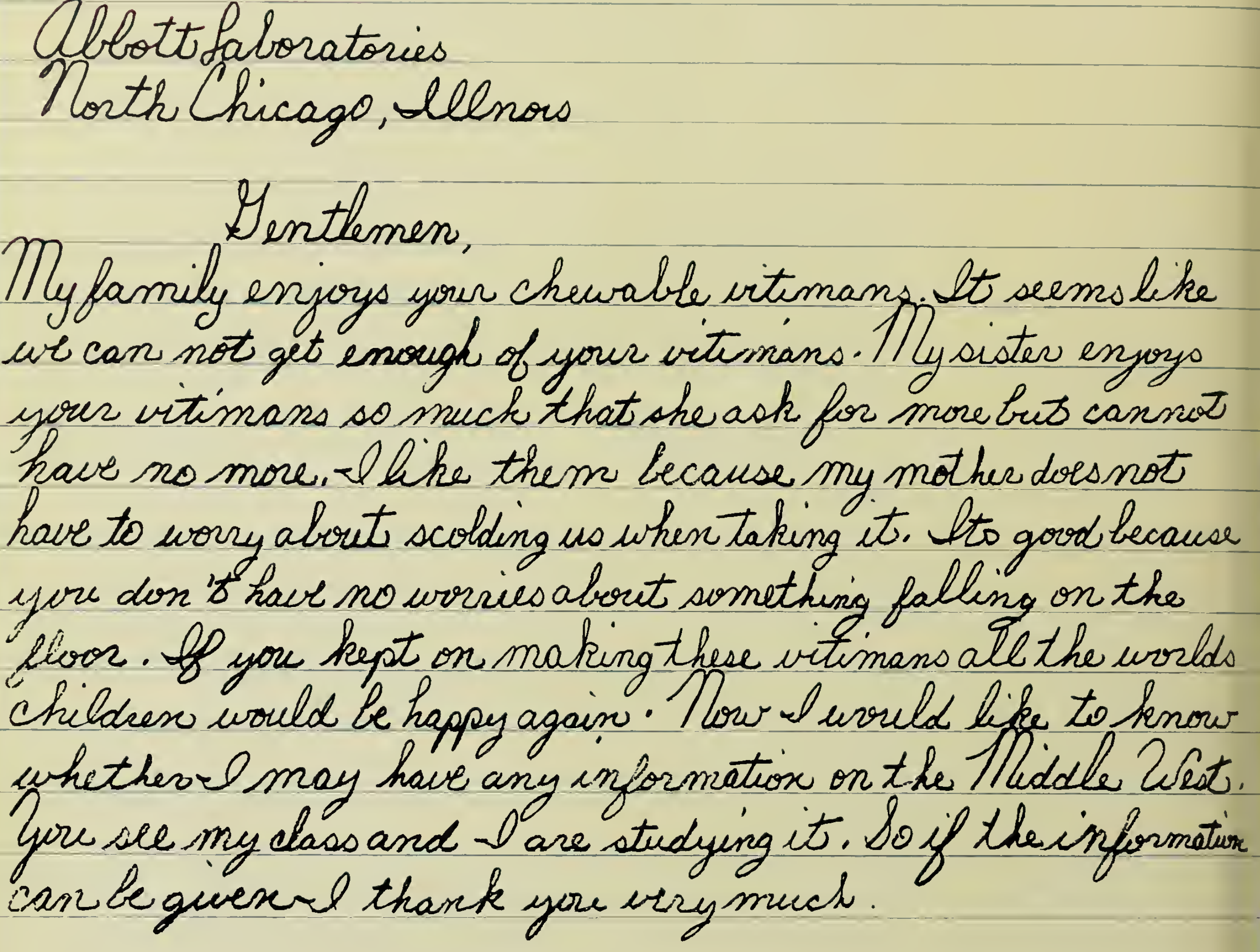
VI-DAYLIN—Vitamins A, D, B_1, B_2, B_6, B_{12}, C, and Nicotinamide, Abbott; VIDAYLIN-M—Homogenized Mixture of Vitamins with Minerals, Abbott; VI-DAYLIN-T—High Potency Multivitamins, Abbott.

Remember, there are *three* liquid formulas: Vi-Daylin, ViDaylin-M® (with minerals), and ViDaylin-T® (therapeutic). And if patients get a little owlly and won't touch *anything* in a spoon, you can give them the new Chewable (please see back of this page).

Each delicious, 5-cc. teaspoonful of Vi-Daylin supplies the following proportions of the Minimum Daily Requirements of:

		MDR (Children)	MDR (Infants)
Vitamin A	0.9 mg. (3000 units)	1	2
Vitamin D	10 mcg. (400 units)	1	1
Thiamine HCl (B_1)	1.5 mg.	2	6
Riboflavin (B_2)	1.2 mg.	1⅓	2
Ascorbic Acid (C)	50 mg.	2½	5
Nicotinamide	10 mg.	1⅓	2

Also supplies cyanocobalamin (B_{12}) 3 mcg. and pyridoxine Hydrochloride 1 mg.



Abbott Laboratories
North Chicago, Illnois

Gentlemen,

My family enjoys your chewable vitimans. It seems like we can not get enough of your vitimans. My sister enjoys your vitimans so much that she ask for more but cannot have no more. I like them because my mother does not have to worry about scolding us when taking it. Its good because you don't have no worries about something falling on the floor. If you kept on making these vitimans all the worlds children would be happy again. Now I would like to know whether I may have any information on the Middle West. You see my class and I are studying it. So if the information can be given I thank you very much.

"...all the worlds children would be happy again."

(an unsolicited testimonial from an actual letter)

100
Vi-Daylin
8 ESSENTIAL VITAMINS
CHEWABLE
DULCETS

ABBOTT

Stelazine® will stop anxiety—but not your patient!
brand of trifluoperazine

To be truly useful in your office patients, an ataractic agent must not only relieve anxiety; it must also leave these patients sufficiently alert to engage in their normal activities.

'Stelazine' is such an agent. Its ability to relieve anxiety without producing appreciable sedation has been established in thousands of patients and documented by many published reports. Typical is the finding of Kolodny,[1] who concluded that the primary advantage of 'Stelazine' over many other tranquilizers seems to be "its ability to relieve symptoms of anxiety without undue interference with alertness."

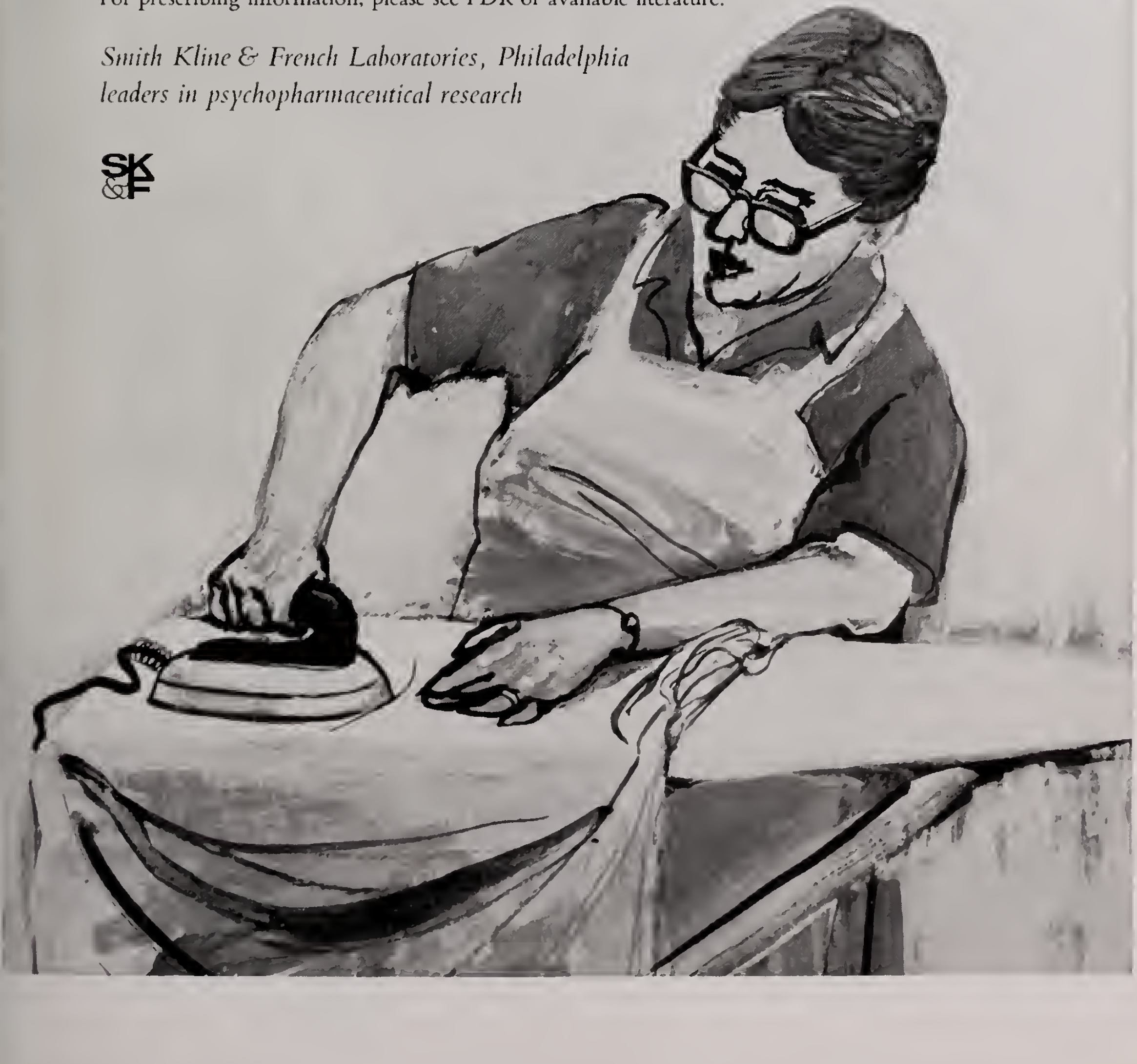
When you wish to relieve anxiety, yet encourage the patient to engage in his normal activities, consider 'Stelazine'.

1. Kolodny, A.L.: Dis. Nerv. System *22*:151 (Mar.) 1961.

For prescribing information, please see *PDR* or available literature.

Smith Kline & French Laboratories, Philadelphia
leaders in psychopharmaceutical research

SK&F

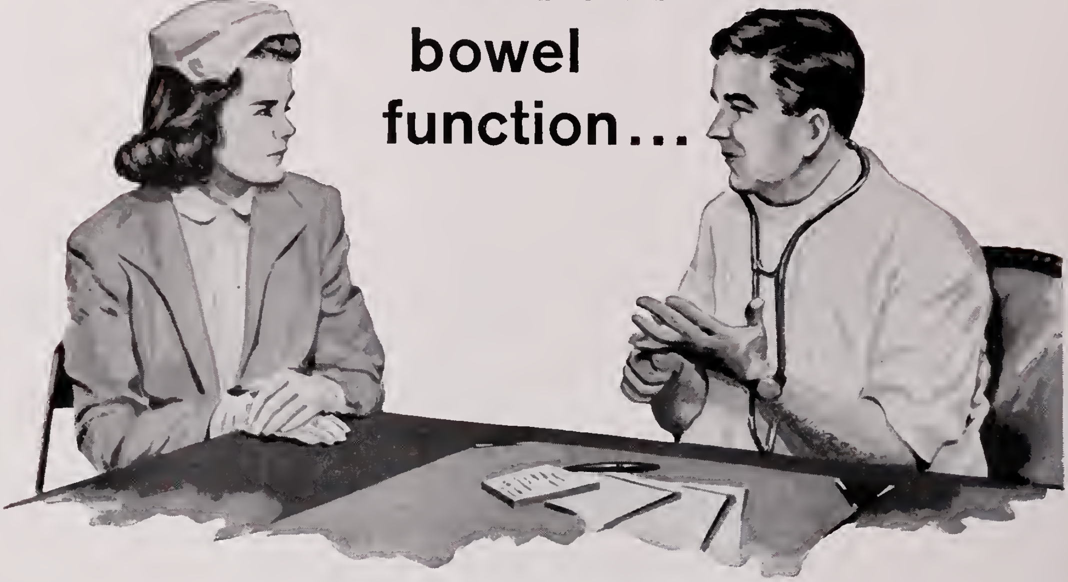


you can **safely** and **effectively**

NORMALIZE

bowel

function...



with THE Hydrophilic Colloids . . .

KONSYL or **L. A. FORMULA**

a mixture of pure hemicelluloses	pure hemicelluloses dispersed in lactose and dextrose

bp
KONSYL
PLANTAGO
OVATA
COATING
BURTON, PARSONS & CO

- A liquid stool contains only 10 per cent more water than the hardest scybalum.[1]
- In diarrhea the hydrophilic colloid absorbs free fecal water to create a formed gel.[2]
- In constipation, the hydrophilic colloid retains water in the stool against the strong dehydrating function of the colon.[2]

bp
L. A.
FORMULA
PLANTAGO
OVATA
COATING
BURTON, PARSONS & CO

Since the most important single ingredient in the restoration of normal bowel function is a soft formed bulk of proper consistency, USE

KONSYL . . . . or . . . . L. A. FORMULA

for the obese patient who needs calorie-free medication	for the 'finicky' eater who requires unsurpassed palatability

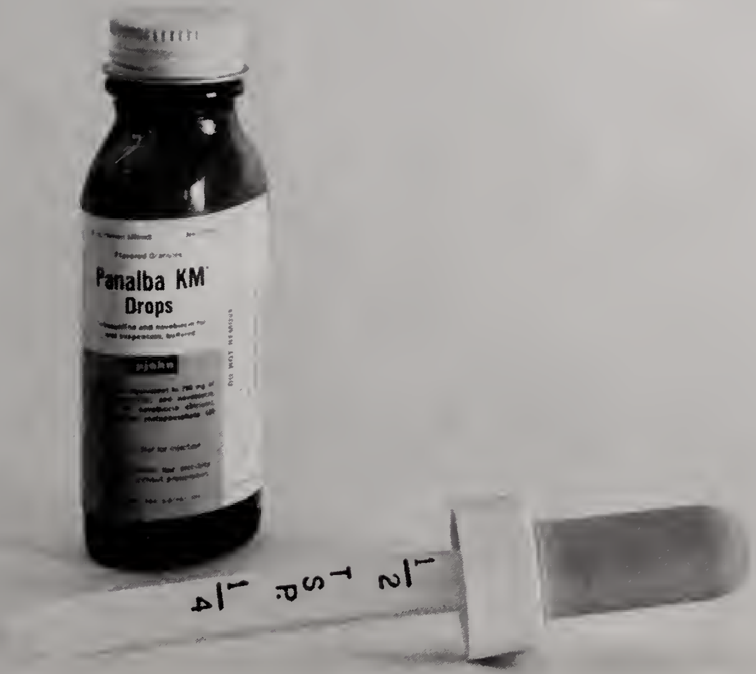
to NORMALIZE both constipation and diarrhea

Made since 1932 by

BURTON, PARSONS & CO., INC., WASHINGTON 9, D. C.

Originators of Fine Hydrophilic Colloids

1. Tainter, M. L., and Buchanan, O. H., Ann. N. Y. Acad. Sc. 58:438, 1954.
2. Pinparker, B. D., Panstian, F. F., Roth, J. L. A. and Bockus, H. L., Gastroenterology 40:397, 1961.



Supplied: Flavored granules for suspension, in 30 cc. bottles with dropper-stopper calibrated in ¼ and ½ teaspoonful graduations. After mixing and shaking with 25 cc. water, each 5 cc. teaspoonful of suspension will contain:
Panmycin* (tetracycline)
  equivalent to tetracycline
  hydrochloride .... 125 mg.
Albamycin* (as novobiocin
  calcium) .... 62.5 mg.
Potassium
  metaphosphate ... 100 mg.

Usual pediatric dosage:
½ teaspoonful per 7½ to 10 pounds of body weight per day, administered in two to four equally divided doses.

(Reminder advertisement. Please see package insert for detailed product information.)

*TRADEMARK, REG. U.S. PAT. OFF.
COPYRIGHT 1962, THE UPJOHN COMPANY

THE UPJOHN COMPANY
KALAMAZOO, MICHIGAN

Upjohn

Liquid asset

Now that we have added a new liquid-dosage form to our Panalba* family, you may prefer to begin treatment with Panalba KM* Drops when dealing with bacterial infections of unknown etiology in infants and children. From the outset, pending laboratory determinations, your treatment is broadened in antibacterial coverage because of the simultaneous administration of two antibiotics that complement each other. They were carefully chosen for this purpose.

Panalba combines tetracycline (selected for its breadth of coverage) and novobiocin (selected for its unique effectiveness against staph). That is why, in most bacterial infections of unknown etiology, Panalba offers excellent chances for therapeutic success—and why it should be your antibiotic of *first* resort.

NEW!

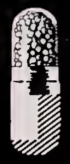
Around the clock relief for

HAY FEVER DISTRESS

ISOCLOR® TIMESULE®

A NEW COMPREHENSIVE RELIEF

- **Relief usually starts in minutes**—to open nasal passages, stop running nose and eyes, sneezing, wheezing, itching and post-nasal drip
- **Relief usually lasts up to 12 hours** with a single oral dose
- **Gives both** upper respiratory decongestion and bronchodilatation to relieve chest discomfort
- **With minimal** drowsiness, CNS or pressor stimulation



Isoclor Timesule, actual size

MADE POSSIBLE BY THE NEW TIMESULE RELEASE MECHANISM

Schematic drawing of Timesule cell showing dialysis through permeable coating.

Release with the Isoclor Timesule is at a relatively even, constant rate, independent of gastrointestinal motility, pH, or enzymatic activity. Each Timesule pellet is actually a micro dialysis cell, consisting of a drug core with coating of dialyzing membrane of precisely controlled permeability. Approximately 20% of active drugs are released within one hour and 80% in 8 hours. Peaks and valleys of over-release and under-release are minimized for constant, controlled relief with minimum side effects.

EACH ISOCLOR TIMESULE CONTAINS:

Chlorpheniramine maleate	10 mg.
d-Isoephedrine HCL	65 mg.

In a special form providing prolonged therapeutic effect.

DOSE: Adults: One Timesule every 12 hours, or as directed.

WARNING: Use with caution in patients suffering from hypertension, cardiac disease, hyperthyroidism or diabetes. Patients susceptible to the soporific effect of chlorpheniramine should be warned against driving or operating machinery should drowsiness occur.

CHARLES C. HASKELL & COMPANY A S DIV ARNAR-STONE LABORATORIES, INC.
Richmond, Virginia

For peptic ulcer gastric hyperacidity and gastritis...

In year-long study on peptic-ulcer patients

New Creamalin® Antacid Tablets

*"...faster in onset of action...and for a longer period"**

"Clinical studies in 85 patients with duodenal ulcer ...confirmed the superiority of the new preparation [new Creamalin] over standard aluminum hydroxide preparations, in that prompt relief was achieved and maintained throughout the period of observation."*

Patients were followed for about one year.

New Creamalin promotes ulcer healing, permits less frequent feedings because it is so long-acting. Heartburn and epigastric distress were "...easily and adequately controlled...."* New Creamalin has the therapeutic advantage of a liquid antacid with the convenience of a palatable tablet. *It does not cause constipation.*

Each new Creamalin tablet contains 320 mg. of specially processed highly reactive dried aluminum gel (stabilized with hexitol) with 75 mg. of magnesium hydroxide. Minute particles offer a vastly increased surface area.

Dosage: Gastric hyperacidity—from 2 to 4 tablets as needed. Peptic ulcer or gastritis—from 2 to 4 tablets every two to four hours. *How Supplied:* Bottles of 50, 100, 200 and 1000.

Now also available—New Creamalin Improved Formula Liquid. Pleasant mint flavor—creamy pink color. Stabilized reactive aluminum and magnesium hydroxide gel (1 teaspoon equals 1 tablet). Bottles of 8 and 16 fl. oz.

Creamalin, trademark reg. U.S. Pat. Off.

*Schwartz, I. R.:
Current Therap. Res. 3:29, Feb., 1961.

Winthrop
LABORATORIES
New York 18, N.Y.

MEDICAL ANNALS
OF THE DISTRICT OF COLUMBIA

Editorial and Business Offices: 1718 M Street, N.W., Washington 6, D. C.

Editor

Wallace M. Yater, M.D.

Managing Editor

George W. Cooley

Assistant Editor

A. Louise Eckburg

EDITORIAL BOARD

Frederic G. Burke, M.D.
I. Phillips Frohman, M.D.
Winfred Overholser, M.D.
Thomas M. Peery, M.D.
Herbert P. Ramsey, M.D.
George E. Schreiner, M.D.
Donald Stubbs, M.D.
Charles Stanley White, M.D.

CONSULTING EDITORS

Irving B. Brick, M.D.
Professor of Medicine,
Georgetown University School of Medicine

Captain Thomas E. Cone, Jr., MC, USN
Chief, Pediatric Service, United States Naval Hospital

W. Montague Cobb, M.D.
Professor of Anatomy
Howard University College of Medicine

Vernon Knight, M.D.
Clinical Director, National Institute of Allergy and Infectious Diseases, National Institutes of Health

Walter Kurland, M.D.
Admitting-Personnel Physician,
Veterans Administration Hospital

Colonel Conn L. Milburn, Jr., MC, USA
Director, Walter Reed Army Institute of Research, Walter Reed Army Medical Center

Alvin E. Parrish, M.D.
Associate Professor of Medicine, and Associate Dean,
George Washington University School of Medicine

Colonel Frank M. Townsend, MC, USAF
Director, Armed Forces Institute of Pathology

THE MEDICAL SOCIETY OF THE DISTRICT OF COLUMBIA
1962
OFFICERS

J. Spencer Dryden, *President*
Karl C. Corley, *President-elect*
Frank S. Pellegrini, *First Vice President*
Naomi M. Kanof, *Second Vice President*
Mr. George W. Cooley, *Secretary-Treasurer*

EXECUTIVE BOARD

James W. Watts, *Chairman, term expires 1962*
W. LeRoy Dunn, *term expires 1963*
Victor R. Alfaro, *term expires 1964*
Duane C. Richtmeyer, *term expires 1965*

Ex Officiis

J. Spencer Dryden
Raymond T. Holden
Karl C. Corley
Mr. George W. Cooley, *Secretary*

BOARD OF CREDENTIALS

Edward W. Nicklas, *Chairman, term expires 1962*
William A. Howell, *term expires 1963*
Luther W. Gray, *term expires 1964*

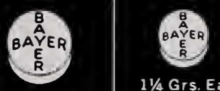
DELEGATES

American Medical Association

Raymond T. Holden
C. Willard Camalier, Jr.
Clifton R. Gruver, *Alternate*
Thomas M. Peery, *Alternate*

LEGAL COUNSEL

Warren E. Magee



1¼ Grs. Ea.
FLAVORED

Living up to a family tradition

There are probably certain medications which are special favorites of yours, medications in which you have a particular confidence.

Physicians, through ever increasing recommendation, have long demonstrated their confidence in the uniformity, potency and purity of Bayer Aspirin, the world's first aspirin.

And like Bayer Aspirin, Bayer Aspirin for Children is quality controlled. No other maker submits aspirin to such thorough quality controls as does Bayer. This assures uniform excellence in both forms of Bayer Aspirin.

You can depend on Bayer Aspirin for Children for it has been conscientiously formulated to be the best tasting aspirin ever made and to live up to the Bayer family tradition of providing the finest aspirin the world has ever known.

Bayer Aspirin for Children—1¼ grain flavored tablets—Supplied in bottles of 50.

● We welcome your requests for samples on Bayer Aspirin and Flavored Bayer Aspirin for Children.

New
GRIP-TIGHT CAP
for Children's
Greater Protection

FLAVORED
BAYER
ASPIRIN
FOR
CHILDREN
Genuine
50 TABLETS
1¼ GRS. EA
THE BAYER COMPANY

THE BAYER COMPANY, DIVISION OF STERLING DRUG INC., 1450 BROADWAY, NEW YORK 18, N. Y.

blood pressure approaches normal more readily, more safely....simply with Salutensin®

(hydroflumethiazide, reserpine, protoveratrine A—antihypertensive formulation)

Early, efficient reduction of blood pressure. Only Salutensin combines the advantages of protoveratrine A ("the most physiologic, hemodynamic reversal of hypertension"[1]) with the basic benefits of thiazide-rauwolfia therapy. The potentiating/additive effects of these agents[2-8] provide increased antihypertensive control at dosage levels which reduce the incidence and severity of unwanted effects.

Salutensin combines Saluron® (hydroflumethiazide), a more effective 'dry weight' diuretic which produces up to 60% greater excretion of sodium than does chlorothiazide[9]; reserpine, to block excessive pressor responses and relieve anxiety; and protoveratrine A, which relieves arteriolar constriction and reduces peripheral resistance through its action on the blood pressure reflex receptors in the carotid sinus.

Added advantages for long-term or difficult patients. Salutensin will reduce blood pressure (both systolic and diastolic) to normal or near-normal levels, and maintain it there, in the great majority of cases. Patients on thiazide/rauwolfia therapy often experience further improvement when transferred to Salutensin. Further, therapy with Salutensin is both economical and convenient.

Each Salutensin tablet contains: 50 mg. Saluron® (hydroflumethiazide), 0.125 mg. reserpine, and 0.2 mg. protoveratrine A. See Official Package Circular for complete information on dosage, side effects and precautions.

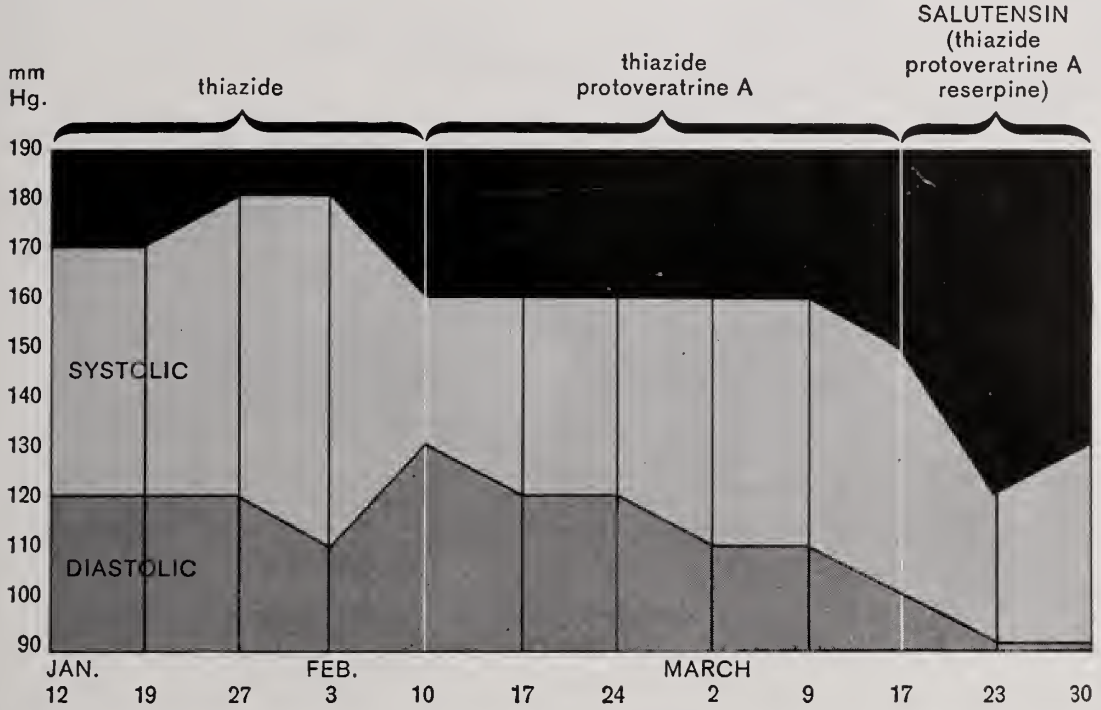
Supplied: Bottles of 60 scored tablets.

References: 1. Fries, E. D.: In Hypertension, ed. by J. H. Moyer, Saunders, Phila., 1959 p. 123. 2. Fries, E. D.: South M. J. **51**:1281 (Oct.) 1958. 3. Finnerty, F. A. and Buchholz, J. H.: GP **17**:95 (Feb.) 1958. 4. Gill, R. J., et al.: Am. Pract. & Digest Treat. **11**:1007 (Dec.) 1960. 5. Brest, A. N. and Moyer, J. H.: J. South Carolina M. A. **56**:171 (May) 1960. 6. Wilkins R. W.: Postgrad. Med. **26**:59 (July) 1959. 7. Gifford, R. W., Jr.: Read at the Hahnemann Symp. on Hypertension, Phila. Dec. 8 to 13, 1958. 8. Fries, E. D., et al.: J. A. M. A. **166**:137 (Jan. 11) 1958. 9. Ford, R. V. and Nickell, J.: Ant. Med. & Clin. Ther. **6**:461, 1959.

all the antihypertensive benefits of thiazide-rauwolfia therapy plus the specific, physiologic vasodilation of protoveratrine A

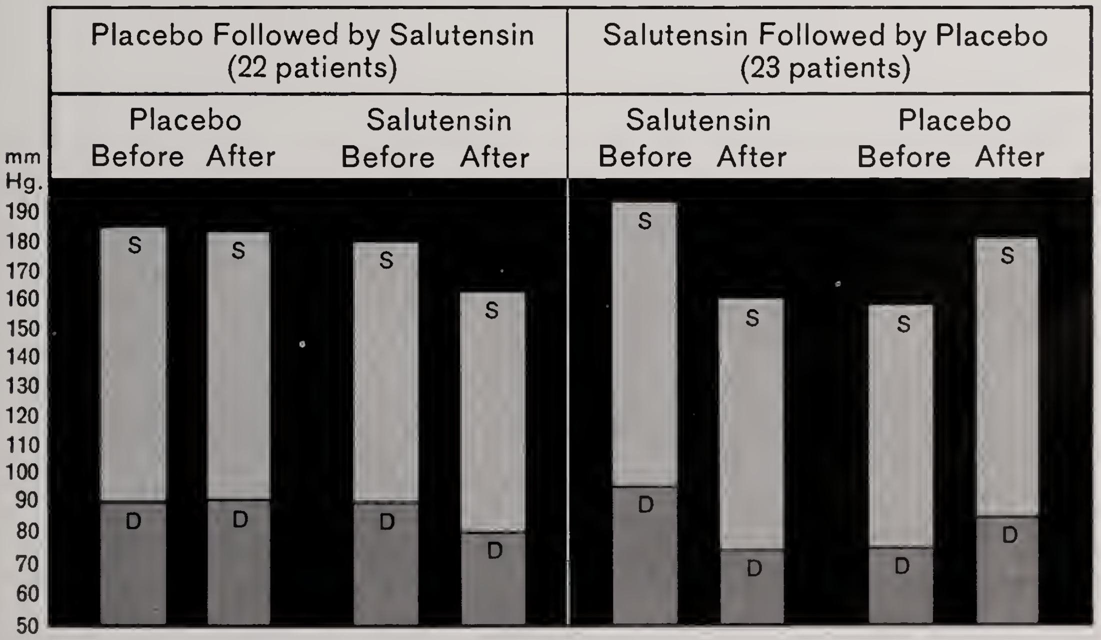
11 WEEKS TO LOWER BLOOD PRESSURE TO DESIRED LEVELS BY SERIAL ADDITION OF THE INGREDIENTS IN SALUTENSIN IN A TEST CASE

(Adapted from Spiotta, E. J.: Report to Department of Clinical Investigation, Bristol Laboratories)



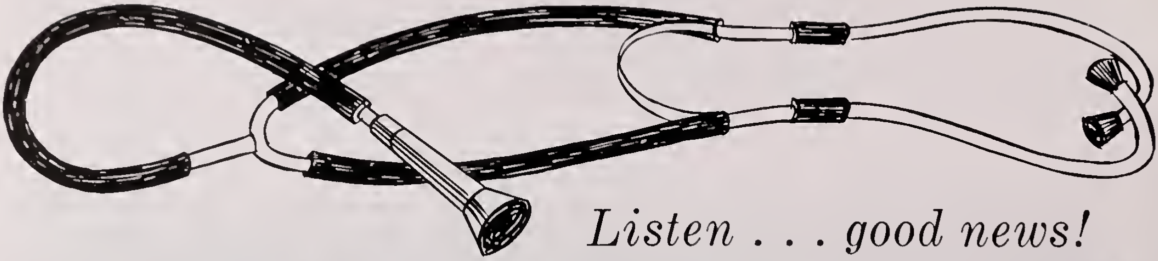
3½ WEEKS TO LOWER BLOOD PRESSURE TO DESIRED LEVELS USING SALUTENSIN FROM THE START OF THERAPY IN A "DOUBLE BLIND" CROSSOVER STUDY

Mean Blood Pressures—Systolic (S) and Diastolic (D)



In this "double blind" crossover study of 45 patients, the mean systolic and diastolic blood pressures were essentially unchanged or rose during placebo administration, and decreased markedly during the 25 days of Salutensin therapy. (Smith, C. W.: Report to Department of Clinical Investigation, Bristol Laboratories.)

BRISTOL LABORATORIES / Div. of Bristol-Myers Co., Syracuse, N.Y.



Listen . . . good news!

GET BROADER PROTECTION AGAINST CLAIMS RESULTING FROM PRACTICE OF MEDICINE

with St. Paul's Professional Liability Insurance

1. **Broader Protection.** A *St. Paul* policy assures you of complete "professional services" protection.

2. **Absence of Exclusions.** All professional liability policies are not the same. The *St. Paul* policy has only one exclusion—Workman's Compensation as it applies to your own employees.

3. **Experienced, Sound Company.** The *St. Paul* has established an enviable record of competence extending over more than 100 years.

4. **Effective Defense and Prevention.** Close liaison with doctors and medical societies helps the Company to pinpoint areas of risk and to develop educational material which assists doctors in avoiding claims.

For complete information on "broader protection" Professional Liability Insurance see your nearest *St. Paul* agent.

THE ST. PAUL
INSURANCE COMPANIES

Serving you around the world... around the clock

St. Paul Fire & Marine Insurance Company
St. Paul Mercury Insurance Company
Western Life Insurance Company

Approved Carrier of The Medical Society of the District of Columbia

The following Agents are ready to serve you and are as close as your telephone:

M. Abrams & Co., 514 Washington Bldg.
Washington 5, D.C. NAtional 8-6578

Anderson & Company, Inc., 1832 M St., N.W.,
Washington 6, D.C. FEderal 8-4730

A. H. Baker & Company, 930 Woodward Bldg.,
Washington 5, D.C. EXecutive 3-2460

District Agency Company, 800 Investment Bldg.
1511 K Street, N.W., Washington 5, D. C.
NAtional 8-8756

Eig & McKeever, ℅ Eig & McKeever
Silver Spring, Maryland. JUniper 8-8200

Feldmann Insurance Agency, 267 Carroll St., N.W.,
Washington 12, D.C. TUckerman 2-4079

Greater Washington Agency, Inc., 419 Union
Trust Building, Washington 5, D. C.
STerling 3-8383

Harrell Brothers & Campbell, Suite 101,
1757 K St., N.W., Washington 6, D.C.
STerling 3-3555

Insurance Services Co., Inc.
3408 Wisconsin Ave., N.W.
Washington 16, D.C.
WOodley 6-8180

Lampson & Ashley Ins. Agency
7044 Carroll Ave., Takoma Park, Md.
JUniper 5-7166

LeRoy Mark, Inc., 408 Colorado Bldg.,
Washington 5, D.C. NAtional 8-0601

Martens & Moore. Inc., 4801 Wisconsin Ave., N.W.,
Washington 16, D.C. EMerson 3-5300

McDermott Insurance, 1130 17th St., N.W.,
Washington 6, D.C. DIstrict 7-1114

Harry Merkin Company, 815 15th Street, N.W.,
Washington 5, D.C. STerling 3-4977

H. Gabriel Murphy & Co., Inc.,
1001 Connecticut Ave., N.W., Washington 6, D.C.
DIstrict 7-9300

Howard W. Phillips & Co., 1820 N St., N.W.,
Washington 6, D.C. FEderal 8-2121

Russell, Marsh & Kennedy, Inc., Marsh Building,
1832 M St., N.W., Washington 6, D.C.
FEderal 8-7600

Victor O. Schinnerer & Co., Inc.
1131 Investment Bldg., Washington 5, D.C.
REpublic 7-1929

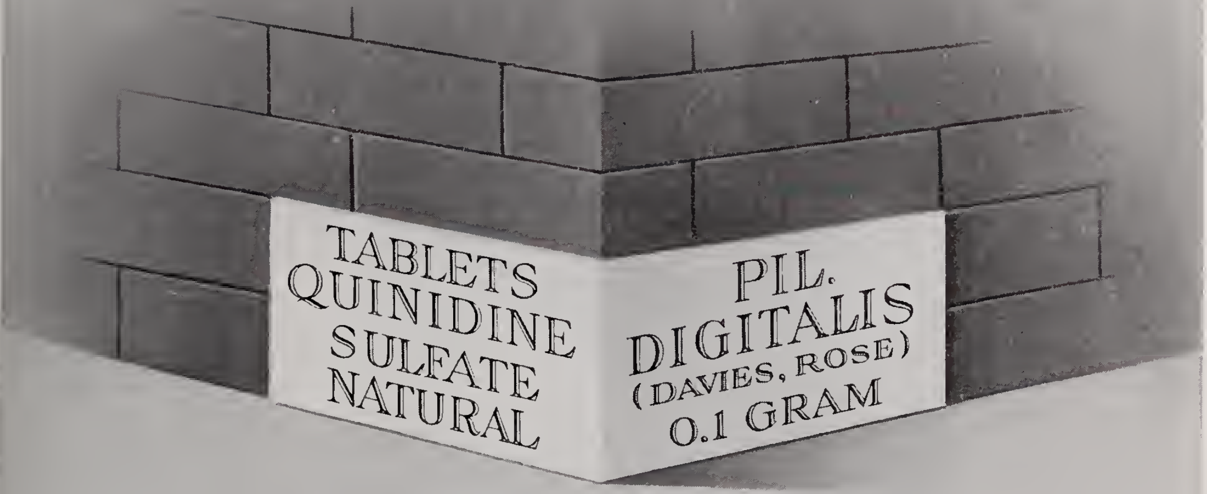
Walker & Dunlop Agency, Inc.
905 16th Street, N.W.
Washington 6, D.C.
STerling 3-5050

Watson & Watson, Sheraton Bldg.,
711 14th St., N.W., Washington 5, D.C.
DIstrict 7-7166

Young & Simon, 340 Woodward Bldg.,
Washington 5, D.C.
DIstrict 7-5180

WASHINGTON, D.C. OFFICE
910 17th St., N.W. Washington 6, D.C.
COMPLETE CLAIMS SERVICE—Tel. 296-4474

A CORNERSTONE OF CARDIAC THERAPY


TABLETS QUINIDINE SULFATE NATURAL
PIL. DIGITALIS (DAVIES, ROSE) 0.1 GRAM

The Dictionary defines a cornerstone as something of fundamental importance, just as Pil. Digitalis, (Davies, Rose) and Tablets Quinidine Sulfate Natural (Davies, Rose) are of fundamental importance in treating your cardiac patients. These preparations represent 60 years of experience and dependability in the manufacture of pharmaceuticals.

Pil. Digitalis (Davies, Rose), 0.1 Gram (approx. 1½ grains) which comprise the entire properties of the leaf, provide a dependable and effective means of digitalizing the cardiac patient, and of maintaining the necessary saturation.

Tablets Quinidine Sulfate Natural, 0.2 Gram (approx. 3 grains) are alkaloidally assayed and standardized, insuring uniformity and therapeutic dependability. Each tablet is scored for the convenient administration of half dosages.

Davies, Rose & Company, Limited - Boston 18, Mass.

DO-2

symptom-
free

. . . even though surrounded by allergens. Co-Pyronil® provides smooth, continuous control of allergic symptoms—relief in minutes for hours, with virtually no side-effects. And there is a dosage form for every allergic patient.

Pulvules® · Suspension · Pediatric Pulvules **Co-Pyronil®**
(pyrrobutamine compound, Lilly)

Each Pulvule contains Pyronil® (pyrrobutamine, Lilly), 15 mg.; Histadyl® (methapyrilene hydrochloride, Lilly), 25 mg.; and Clopane® Hydrochloride (cyclopentamine hydrochloride, Lilly), 12.5 mg. Each pediatric Pulvule or 5-cc. teaspoonful of the suspension contains half of the above quantities. This is a reminder advertisement. For adequate information for use, please consult manufacturer's literature. Eli Lilly and Company, Indianapolis 6, Indiana.

258017

Lilly

MEDICAL ANNALS
of the District of Columbia

September 1962
VOLUME XXXI • NUMBER 9

THE GEORGE WASHINGTON UNIVERSITY NUMBER

This is the sixth of a second series of special numbers of the Medical Annals, the scientific material for which is supplied by medical institutions and scientific organizations in the Washington Metropolitan Area. For The George Washington University Number, the Editorial Board is indebted to Dr. Alvin E. Parrish, Consulting Editor of the Medical Annals, who secured the papers which appear in this issue.

Cardiac Tamponade due to Pericardial Effusion

PAUL C. ADKINS, M.D.
Associate Professor of Surgery, George Washington University School of Medicine

GEORGE A. KELSER, JR., M.D.
Associate Professor of Medicine, George Washington University School of Medicine

There are many causes of acute pericardial effusion. Among these are viral infections, bacterial infections including tuberculosis, surgery of the heart or great vessels, metastatic lesions, and a number of poorly defined causes which are generally termed "idiopathic pericarditis." An acute pericardial effusion may progress to acute cardiac tamponade in a few hours or a few days. Regardless of the cause, rapid accumulation of 300 to 500 ml. of fluid in the pericardial sac may significantly reduce cardiac output and place the life of the patient in jeopardy. Consequently, early recognition and definitive treatment are essential.

Experiences with 12 cases during the past two years have led us to appreciate certain specific points concerning the diagnosis and management of this medical emergency (table 1). Two of the patients in this group had pericardial tamponade as a result of iatrogenic trauma. One patient (case 11) developed a pericardial effusion eight days following open-heart surgery for pure pulmonic stenosis. The other patient (case 9) developed tamponade as a result of inadvertent puncture of the root of the aorta during transseptal left-heart catheterization. In case 2 the pericardial effusion was the result of a myocardial infarction and superimposed anticoagulant therapy with secondary hemorrhagic effusion in the pericardial sac. The remaining patients developed an effusion due to viral or idiopathic pericarditis, and tuberculous pericarditis, and in two instances metastases to the pericardium from carcinoma of the breast.

TABLE I

Data on Twelve Cases of Cardiac Tamponade

Case	Etiology	Duration of Symptoms	Pericardiocentesis	Pericardial Window	Result
1. V. S. 55 CF	? Viral	10 days	4/11/61	4/13/61	Recovered
2. M. H. 48 WF	Myocardial infarct and anticoagulation therapy	4 days	7/27/60 7/30/60 9/20/60	—	Recovered
3. D. S. 22 WF	? Viral	10 days	10/25/61	10/25/61	Died 11/3/61
4. R. P. 53 CF	Nonspecific	3 weeks	8/11/61	8/15/61	Recovered
5. H. H. 56 CM	? Tuberculous	3 weeks	12/27/61	—	Recovered
6. A. D. 34 CF	Pericardial metastases from breast carcinoma	3 days	10/29/61	10/29/61	Died
7. L. M. 39 CF	Pericardial metastases from breast carcinoma	2 days	7/25/60	Refused	Died
8. S. H. 38 WM	? Viral	2 weeks	8/25/61	8/26/61	Recovered
9. A. T. 40 CF	Hemopericardium secondary to cardiac catheterization	3 hours	1/19/61	1/19/61	Recovered
10. S. D. 53 CM	Tuberculous	2 weeks	10/ 3/60 10/ 4/60	10/ 4/60	Died
11. M. C. 6 WF	Postoperative	1 day	6/ 3/60 6/10/60	—	Recovered
12. W. W. 65 CM	Nonspecific	10 days	6/13/60	—	Recovered

DIAGNOSIS

The major physical signs of acute pericardial effusion are dependent to some degree upon the amount of fluid in the pericardial sac and the rapidity with which this has accumulated. The presence of a pericardial friction rub, although evidence of pericarditis, does not necessarily indicate an accumulation of fluid. On the other hand, a friction rub which disappears with subsequent development of signs of cardiac tamponade may be indicative of rapid accumulation of fluid in the pericardial sac. Narrowing of the pulse pressure, pulsus paradoxus, increased venous pressure, and liver tenderness are all classical signs of cardiac tamponade. Sudden development of any or all of these manifestations must be considered a danger signal of impending circulatory embarrassment. The characteristic radiologic finding in acute pericardial effusion is a moderate increase in the transverse cardiac diameter with a globular or "water-bottle" configuration in the frontal projection. Fluoroscopy and roentgenkymography may be helpful in demonstrating diminished cardiac pulsations. However, this finding often accompanies cardiac dilatation without effusion; therefore, these procedures frequently do not offer great aid in diagnosis. Electrocardiography is not extremely helpful, but an ST vector of acute pericarditis and diminished voltage when present are highly suggestive of a pericardial effusion. The most helpful study in establishing the diagnosis of a pericardial effusion and differentiating this from enlarged heart chambers is the carbon dioxide angiocardiogram.[1] This can be performed simply and without significant risk even in seriously ill patients. The negative contrast angiocardiogram simply establishes the fact that there is an abnormal thickness of the right atrial band. It does not differentiate between a thickened pericardium and a pericardial effusion. Consequently, this study must be interpreted in light of the history and physical findings in each case.

MANAGEMENT

The *sine qua non* of management of acute pericardial effusion is early recognition and appreciation of the potential dangers of the situation. In the presence of pericardial effusion definitive treatment should be instituted as soon as possible if signs of impending tamponade are present, i.e., pulsus paradoxus, narrowed pulse pressure, or increased venous pressure. The initial management consists primarily of aspiration of the pericardial sac.

Aspiration of the pericardium is best accomplished in the operating room where facilities are available for resuscitation. The patient is positioned on the operating table in a sitting position as nearly erect as can be tolerated. Oxygen, vasopressor drugs, and other emergency medications and equipment should be readily available. An intravenous drip of 5 per cent dextrose in water is started in the arm and connected via a three-way stopcock to a venous manometer, which is made co-planar with the right atrium. The venous and arterial blood pressures are monitored at frequent intervals during the procedure. Electrocardiographic leads are placed on the four extremities. The precordial lead of the patient's cable is attached by a sterile wire* to the pericardiocentesis needle to provide an exploring electrocardiographic lead[2, 3] (figure 1). The preferable site of entry to the pericardial sac is the subxiphoid approach, since danger of injury to chest wall vessels or creation of a pneumothorax is less likely than with other routes. The entire precordium and epigastrium are cleaned and draped. The area over the xiphoid is infiltrated with a local anesthetic agent. A 50 ml. syringe with a three-way stopcock and a no. 18 gauge 2-inch needle with the exploring electrode attached to the hub are then grasped by the operator, and the needle is slowly introduced just to the left of the xiphoid. It is advisable to drape the patient so that he is unable to observe this procedure. The needle is then directed upward at an angle of approximately 15° and slightly to the left with constant gentle suction maintained in the syringe. As the pericardial sac is entered the fluid should be aspirated freely, and the needle should not be advanced further. The exploring or "V" lead obtained from the pericardiocentesis needle is continuously monitored to detect the ST-segment elevation that denotes contact of the needle with the epicardium (figure 2). If the needle comes in contact with the epicardium it is promptly repositioned until the electrocardiographic injury current disappears. The fluid which is aspirated is saved for appropriate diagnostic studies. As much fluid as possible should be removed. If there has been an increase in the venous pressure and narrowing of the pulse pres-

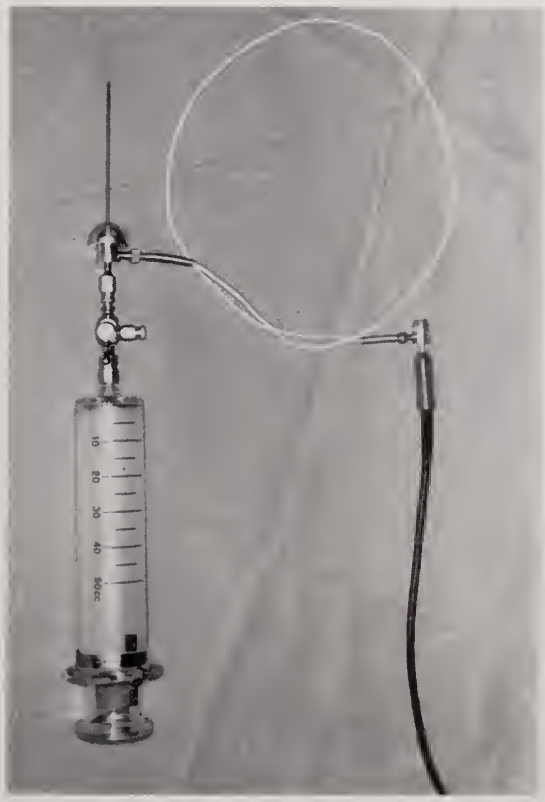


FIG. 1. Previously sterilized teflon coated wire attached to pericardiocentesis needle (left) is connected with the precordial lead (right) of patient cable of the electrocardiograph. The exploring lead is recorded with lead selector switch in "V" position.

---

* Made by Mr. Eric L. J. Penfold, Instrument Shop, Emory University School of Medicine, Atlanta, Georgia.

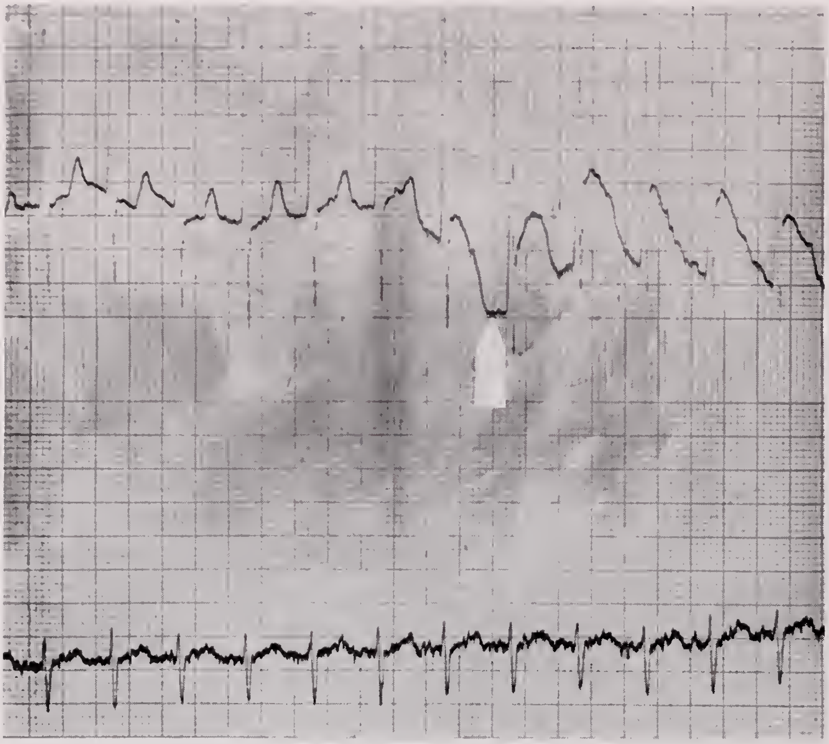


FIG. 2. Top trace: Exploring lead obtained during pericardiocentesis of case 11. Complexes to left of arrow were recorded with pericardiocentesis needle tip in pericardial sac but not touching visceral pericardial surface. When needle position was changed slightly (arrow), baseline shifted abruptly and subsequent complexes revealed moderate ST-segment elevation indicating contact of needle tip with epicardium. Lower trace: Simultaneously recorded lead II, which does not disclose local injury current recorded with exploring electrode.

sure, improvement in these vital signs is usually immediately apparent after aspiration of the pericardial fluid. It is virtually impossible to remove all of the fluid from the pericardial sac even with the patient sitting in the erect position. Nevertheless, in most instances it is possible to remove sufficient fluid to alleviate the manifestations of cardiac tamponade.

After removal of as much fluid as possible, it has been our practice whenever possible to inject 50 ml. of 100 per cent carbon dioxide into the pericardial sac and to obtain an immediate roentgenogram of the chest. This roentgenogram outlines the true cardiac silhouette and the width of the pericardium. In addition, it may delineate any fluid remaining in the pericardial sac (figure 3).

The patient should be observed in the operating room for 10 to 15 minutes following pericardiocentesis to be sure that his vital signs are stable. Upon return to his room continued monitoring of the vital signs, especially arterial and venous pressures, is important to provide early recognition of reaccumulation of fluid. If initial aspiration of the pericardial sac is not successful in alleviating the abnormal vital signs, immediate surgical decompression of the pericardium is indicated.[4] If signs of cardiac tamponade recur within 24 hours it is our belief that surgical decompression is also indicated. Surgical alleviation of the cardiac tamponade associated with an effusion is accomplished under general endotracheal anesthesia. Thoracotomy is accomplished through an incision in the fourth or fifth left anterior intercostal space. This affords excellent exposure of the anterior surface of the pericardium and the left ventricle. The phrenic nerve should be identified and avoided. The pericardium is opened and a large segment removed to create a window which drains into the left pleural space. This procedure affords not only relief of the tamponade but, in addition, provides a specimen of pericardium for histologic examination and culture. If the possibility of an underlying myocarditis is present, a biopsy specimen of the myocardium may be obtained at this time. The biopsy site is closed with interrupted mattress sutures of silk. After the "pericardial window" has been created an intercostal

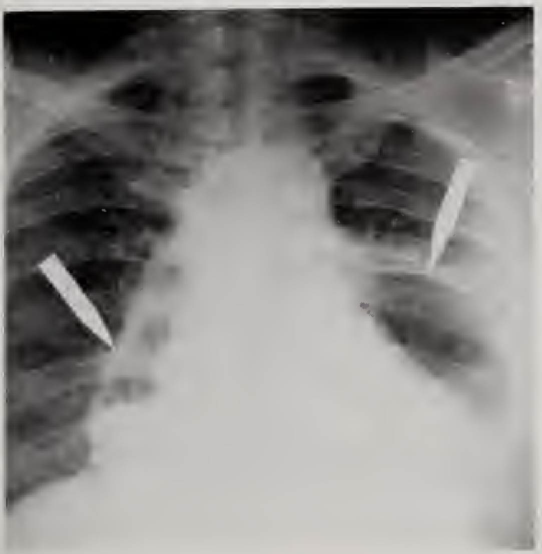


FIG. 3. Radiograph obtained immediately after injection of 50 ml. of 100 per cent carbon dioxide into pericardial sac following pericardiocentesis. Arrows point to pericardium. Note intrapericardial fluid levels on right and left delineating residual pericardial effusion.

catheter is then inserted through a stab wound into the left pleural space and attached to water-seal drainage. The incision is then closed in the routine fashion. The postoperative care is similar to that of other types of thoracic operations.

ILLUSTRATIVE CASES

Case 2. M. H., a 49-year-old white woman, was initially seen on July 14, 1960 because of an acute myocardial infarction. She had a history of long-standing inactive pulmonary tuberculosis. After management of the initial phase of the myocardial infarction she was started on anticoagulant therapy. On July 26, 1960, increased heart size, pulsus paradoxus, cervical vein distention, and a blood pressure of 104/80 were noted. The venous pressure was 210 ml. of H_2O. A carbon dioxide angiocardiogram revealed marked widening of the right atrial band (figure 4B), confirming the clinical impression of pericardial effusion. The possibility of cardiac dilatation secondary to myocardial failure was excluded by this study. The patient was promptly taken to the operating room. Pericardiocentesis was performed through the subxiphoid route. Immediate clinical improvement was apparent after aspiration of 260 ml. of sanguineous fluid. Three days later the patient again developed early signs of cardiac tamponade. The anticoagulants had been stopped. Pericardiocentesis was again performed and yielded 310 ml. of the same type of fluid. The patient was given vitamin K to restore the prothrombin time to normal. During the next month the patient continued to do well and at the end of five weeks was allowed out of bed for short intervals. On September 20, 1960 a chest roentgenogram showed that the cardiac silhouette was still considerably enlarged. A pericardiocentesis performed at this time yielded 450 ml. of serous fluid. Carbon dioxide was injected into the pericardial sac following aspiration, and a roentgenogram

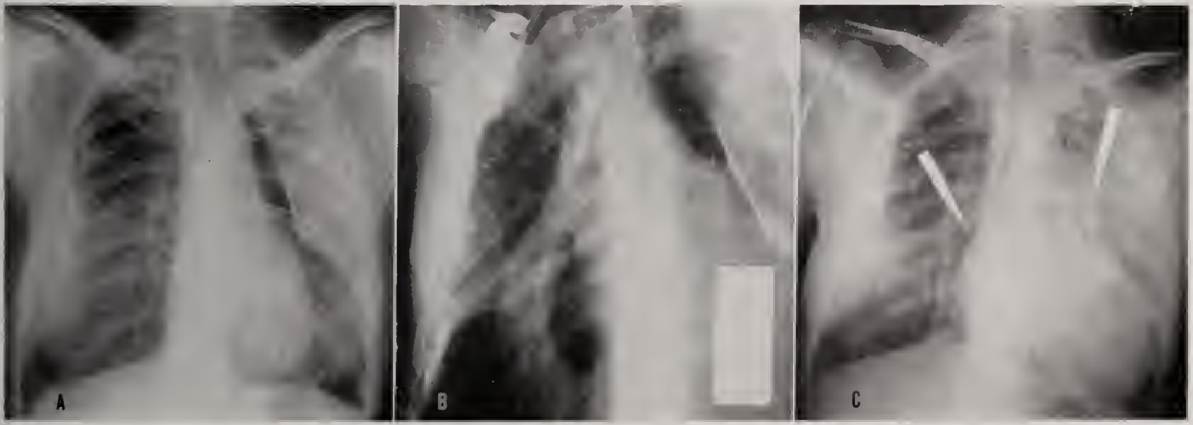


FIG. 4. Case 2. A. P-A radiograph of chest prior to pericardial effusion.

B. Radiograph obtained immediately after intravenous injection of 100 ml. of 100 per cent carbon dioxide showing CO_2 bubble in right atrium delineating an abnormally widened right atrial band.

C. Radiograph obtained following pericardiocentesis immediately after injection of 50 ml. of 100 per cent carbon dioxide into pericardial sac. Arrows point to pericardium.

(figure 4C) showed persistent cardiomegaly. The patient has done well without recurrence of effusion.

COMMENT

This patient undoubtedly had pericardial effusion secondary to the myocardial infarction compounded by the use of anticoagulant therapy. Management consisted of pericardiocentesis on three occasions. Pericardial window was deemed inadvisable in view of the recent myocardial infarction and the slow reaccumulation of fluid.

Case 9. A. T., a 40-year-old colored woman, was admitted for cardiac catheterization. The patient had a history of rheumatic fever at the age of 20 and had signs of mitral and aortic insufficiency. On January 19, 1961 a transseptal left-heart catheterization was performed. The patient appeared to tolerate this well. Approximately three hours after completion of the transseptal left heart catheterization, the patient became hypotensive with a palpable systolic blood pressure of 70 mm. Hg. At that time hemopericardium was suspected because of the possibility of inadvertent puncture of the root of the aorta during the transseptal catheterization. The patient was taken immediately to the operating room, where pericardiocentesis was performed and yielded approximately 50 ml. of sanguineous fluid. There was no significant improvement in the patient's blood pressure. One hundred per cent carbon dioxide was introduced into the pericardial sac, and a portable chest roentgenogram was taken. This revealed a normal pericardium, but the carbon dioxide outlined only the upper 25 per cent of the cardiac silhouette on either side. It was suspected that a large hemopericardium remained. Immediate thoracotomy was performed. Approximately 500 ml. of blood gushed forth when an opening was made in the pericardium. Immediately after opening the pericardium the blood pressure rose from 70 mm. Hg with no perceptible pulse pressure to 110/60 mm. Hg, and the heart rate slowed from 115 to 90 per minute. The patient had an essentially uneventful postoperative course and was discharged from the hospital on her eighteenth postoperative day.

COMMENT

Although a small, generally insignificant, hemopericardium occurs occasionally following percutaneous transthoracic left-heart catheterization, this has been our only experience with hemopericardium associated with the transseptal technique of left-heart catheterization. Some difficulty had been encountered during catheterization in this case in advancing the needle through the interatrial septum. Inadvertently the root of the aorta had been injured by the needle. A significant hemopericardium developed in a period of approximately three hours. There was no clinical response to pericardiocentesis in this case, and thoracotomy was undertaken without delay. The response to creation of a pericardial window was dramatic.

Case 8. S. H., a 38-year-old white man, was admitted because of persistent anterior chest pain. The patient had suffered an acute myocardial infarction at the age of 35 years. Two weeks prior to the present admission fever, chills, anterior chest pain, and diarrhea appeared. These symptoms persisted, and the pain became progressively more unbearable. Upon admission to the hospital the patient's temperature was 36.5°C, the pulse rate 110 per minute, and the blood pressure 110/80. There was a loud friction rub over the precordium. Pulsus paradoxus was not noted at this time. There was tenderness in the epigastrium. The white blood cell count was 11,750. An electrocardiogram showed the changes of acute pericarditis and evidence of the old myocardial infarction. A chest roentgenogram showed a definite increase in the size of the cardiac silhouette when compared with a film taken ten days previously. There was no evidence of pulmonary congestion.

During the next three hours the patient was observed carefully. He then became more dyspneic rather suddenly, and the arterial blood pressure was recorded at 100/80. Pulsus paradoxus appeared. The patient was taken to the operating room, where pericardiocentesis was performed. Two hundred and twenty ml. of serosanguineous fluid was removed easily. The patient experienced immediate relief of his difficulty in breathing. Subsequent studies of this fluid showed it to be sterile with a hemoglobin content of 0.74 mg. and a white blood cell count of 7,350 per cu. mm.

During the next 18 hours the patient gradually developed further difficulty in breathing and abdominal pain on deep inspiration. His blood pressure remained in the range of 100–110/60–80. Pulsus paradoxus reappeared. It was decided to perform a pericardial window. The pericardium was thickened and somewhat tense. It was opened, and multiple pockets of serosanguineous fluid were encountered. The myocardium was pale and covered with a thick, fibrinous exudate. The loculations were removed, and all of the fluid was evacuated from the pericardial sac. A segment of the pericardium measuring approximately 8 by 10 cm. was removed. Drainage was accomplished through the left side of the chest. Histologic examination of the pericardium showed fibrosis with acute and chronic inflammation. The patient had an uneventful postoperative course. His cardiovascular status remained stable. He was discharged from the hospital on the seventeenth postoperative day.

COMMENT

This case represents an acute pericarditis with effusion, probably of viral etiology. The signs of cardiac tamponade developed rapidly over a period of less than an hour. Following pericardiocentesis the relief achieved was very temporary, and permanent decompression was achieved only by surgical creation of a pericardial window.

Discussion

During the past two years 12 patients have been seen with manifestations of cardiac tamponade as a result of rapid accumulation of blood or fluid in the pericardial sac. In none of our 12 cases did cardiac tamponade result from external violence. The duration of symptoms was from three hours to three weeks, and the symptoms consisted primarily of chest pain, dyspnea, orthopnea, and syncope. In five cases the tamponade was relieved by pericardiocentesis alone. In the remaining seven cases a pericardial window was made following pericardiocentesis. All patients survived these procedures; four subsequently expired. Two of the deaths were in patients with pericardial metastases, and these patients both died of carcinomatosis. One patient with tuberculous pericarditis expired as a result of miliary tuberculosis and heart failure. The fourth patient died from uremia as a result of acute renal tubular necrosis. In this patient (case 3) the renal shutdown may have been associated with hypotension due to cardiac tamponade. The remaining patients recovered satisfactorily.

In our experience the carbon dioxide angiocardiogram has been extremely helpful in establishing the presence of a pericardial effusion or thickening of the pericardium and differentiating these from cardiomegaly. This is an extremely simple study to perform, and there have been no untoward effects from its use.

It is apparent that the clinical manifestations of cardiac tamponade secondary to an acute pericardial effusion may develop with great rapidity. Consequently, close observation is mandatory in any patient with acute pericarditis. If cardiac tamponade develops, aspiration of the pericardial sac should be undertaken. The use of the exploring electrode on the pericardiocentesis needle is a valuable safety adjunct. It indicates contact with the epicardium and avoids undue trauma to the heart during aspiration of the pericardial sac. If pericardiocentesis does not relieve the tamponade or if the symptoms recur within a period of 24 hours, pericardial decompression should be accomplished by thoracotomy and removal of a portion of the pericardium. This avoids the possibility of recurrent tamponade, affords permanent relief from a dangerous situation, and also precludes the subsequent development of an adhesive or even constrictive pericarditis.[5, 6]

Summary

Twelve patients with acute cardiac tamponade unassociated with external trauma have been seen in the past two years. In addition to the usual physical findings of acute tamponade, carbon dioxide angiocardiography has been extremely helpful in establishing the diagnosis. An exploring electrode on the pericardiocentesis needle has been helpful in avoiding undue trauma by contact with the epicardial surface.

Pericardiocentesis was performed in all 12 patients. Seven patients underwent surgical creation of a pericardial window in addition to pericardiocentesis.

It is apparent that cardiac tamponade may develop rapidly following a pericardial effusion. Such patients should be observed carefully, and, if signs of tamponade develop, immediate treatment is mandatory.

(Continued on page 564)

New Relief for Leukorrhea

THOMAS M. LEONARD, M.D.

Assistant Clinical Professor of Obstetrics and Gynecology, George Washington University School of Medicine

THE PRACTICE of routinely cleansing the normal, healthy vagina is subject to considerable differences of opinion. A goodly number of physicians still believe that the normal vagina "cleanses itself" and that douching, or other means of cleansing, is not only unnecessary but may even be deleterious to the vaginal mucosa. Consideration of vaginal physiology indicates that there is no rational basis for this opinion. Anatomically, the vagina is a tube, lined with mucous membrane. To all practical purposes, it is a cul-de-sac, open only at the external end because the cervical os is closed except during labor and is only slightly open during the menstrual flow and a few weeks postpartum. In the nonpregnant woman the cervix will admit only an instrument of very small caliber, about the diameter of an 18-gauge needle. Even with this slim instrument a certain amount of pressure is required to introduce it.

With these facts in mind, it is not illogical to consider the vagina as part of the external part of the body rather than as an internal organ. It can be compared to the umbilicus, the nose, the ear, or simply an indentation in the body, lined with specialized epithelial cells. Normally, the vaginal walls are approximated, though capable of enough distention to pass a fetal head without laceration.

The epithelial cells forming the lining of the vagina are not delicate. Histologic sections show the vaginal epithelium to be thicker than the membrane lining the stomach. The entire lining (except the hymenal ring) is sparsely supplied with sensory nerves, so there is very little sensitivity in the vaginal canal and practically none at the surface of the cervix. The cervix can be grasped by a tenaculum or cauterized without local or general anesthesia.

The normal vaginal secretions arise from Bartholin's glands, Skene's glands, and the cervical glands. In the healthy, normal vagina these secretions are clean, mucoid, and tenacious, and have high lubricating properties. Erotic emotions, whether physically or mentally aroused, tend to increase the flow of these secretions. In addition to the natural moistness of the vagina, there is always present some débris, consisting of desquamating epithelial cells. In many women blood left from menstrual flow and the deposition of seminal fluid also add to the débris found in the normal vagina. Since the vaginal walls are normally approximated, most of this vaginal débris cannot be eliminated even by gravity.

Due to constant body temperature, the largely protein nature of vaginal débris, and the presence of carbohydrate (as glycogen), the vagina makes an excellent incubator for a long list of pathogenic and nonpathogenic bacteria, as well as protozoa and fungi.

It is fortunate that the normal acidity of the vagina exerts an inhibiting effect on the propagation of most pathogens. This acidity does not kill the pathogens but merely restrains their multiplication. These pathogens are always present, ready to form the nucleus of an extensive growth at the first favorable change.

The most rational conclusion is that the vagina should be kept as clean as other parts of the body and that its cleansing be as much a part of personal hygiene as bathing or brushing the teeth.

Most gynecologists recommend douches of

some kind when vaginal discharge causes the patient to complain of discomfort or embarrassment due to odor, itching, irritation, or other symptoms. Over years of observation it has been amply demonstrated that douches are inadequate as a means of cleansing because there is no scrubbing action. Patients instructed to douche before coming for a vaginal examination often present copious mucoid extraneous material in the folds of the vagina and on the cervix. All gynecologists know the necessity of the familiar green-soap cleansing of the vagina before specific treatment. Many times this is necessary before a thorough visual examination can be made.

Normal vaginal hygiene is always desirable, but it is imperative in abnormal vaginal invasion by Monilia, Trichomonas and nonspecific bacterial vaginitis. Here, again, we find ordinary douching inadequate, regardless of the type of detergent or medication used.

NEW TECHNIQUE

Three years ago a new method of vaginal cleansing was inaugurated. This method employed a soft cylindrical sponge made of a polyurethane synthetic material. This sponge is approximately $2\frac{1}{4}$ inches long by $\frac{7}{8}$th inch in diameter. It is firmly mounted on a curved plastic handle about 9 inches long. This makes an easily handled device that can be readily manipulated by the patient herself. This instrument (figure 1) can be sterilized by boiling without damage to either handle or sponge.

The cleansing solution used consisted of a 26 per cent solution of alkylamine lauryl sulfate, a detergent widely used in dentifrices and soap substitutes. It is nonirritating and nonallergenic. To this solution was added 2 per cent by volume of hexachlorophene, the well recognized germicide. Patients were instructed to add a few drops of this solution to a small quantity of warm water. The applicator tip was then completely immersed into this diluted solution before inserting into the vagina.

Because of the lubricating properties of the detergent solution and the ready compressibility of the plastic sponge no difficulty was encountered by any patient using the method. Any woman who could use various tampons could use this method of cleansing.

Each patient was instructed to cleanse the entire vagina by a gentle, rotating motion, but not to withdraw and reinsert the applicator repeatedly. Repeated withdrawal and insertion might cause irritation around the introitus or hymenal ring. Patients were advised to cleanse in the shower, tub, or over the toilet. After approximately 10 or 15 seconds of this vaginal "scrubbing" the patient withdrew the applicator and rinsed the vagina with a plain, warm water douche. The whole procedure did not add more than one or two minutes to the time devoted to bathing.

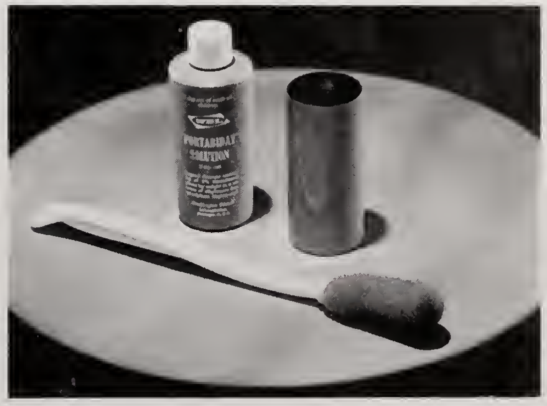


FIG. 1. Instrument and solution for vaginal cleansing.

THERAPEUTIC USE

The first group of patients numbered 200. Each patient was examined vaginally and the general appearance and history of discharge and discomfort noted. Only patients with a vaginal discharge sufficient to soil the clothing were included. Before beginning treatment, a hanging drop specimen from each patient was examined for *Trichomonas vaginalis*. A Monilia culture was taken in 154 cases. Papanicolaou smears were made in 100 cases. Bacterial examination (Gram stains) were made in 20 cases.

All patients were examined at weekly intervals while they continued the daily vaginal cleansing at home. Some of these have been under observation for as long as three years.

RESULTS OF TESTS

MONILIA CULTURES

Total No. of Patients	1st week No. positive	2nd week No. positive	3rd week No. positive
154	44	16	11

The 11 positive cases in the third week of treatment included six pregnant women and one diabetic.

TRICHOMONAS VAGINITIS*

Total No. of Patients	1st week No. positive	2nd week No. positive	3rd week No. positive
200	16*	1	0

---

* Vaginal swabbing was supplemented with a sulfa-base vaginal cream in three cases.

GRAM SMEARS

Before treatment all 20 patients showed a low count of Döderlein bacilli and an abnormally high count of other bacteria and pus cells. After treatment all showed an increase of Döderlein bacilli and a great decrease of other bacteria.

PAPANICOLAOU SMEARS

Papanicolaou smears showed very interesting changes after this cleansing method and are being reported in a separate paper. In general, the smears taken after a period of cleansing were easier to interpret because of the absence of pus and other extraneous material. In the 100 smears taken before cleansing, only one was reported as of Class I (no infection). After a minimal period of one week's cleansing 50 per cent were reported as Class I (no infection). In this short series two Papanicolaou smears that had been reported as Class II were changed to Class III when the smears were repeated after a period of cleansing. The cytologist stated that the first smears contained so many pus cells that the abnormal epithelial cells could not be seen. This suggests that a period of routine cleansing is desirable before a smear is made.

PATIENT REACTIONS

Patients coöperated very well. Few complained of difficulty in performing the daily hygienic measure. After two or three experiences most women accepted vaginal cleansing as routinely as a daily bath. Discomfort or irritation occasionally reported was found to be the result of improper technique.

ROUTINE CLEANSING

During the course of this investigation some gynecologists questioned the wisdom of daily mechanical cleansing, suggesting that the vaginal epithelium might be harmed by such frequent washing of the mucosa. This certainly was not so in the group of patients under observation. On the contrary, after three weeks all showed great improvement. In most cases the vagina had reverted to a normal, healthy appearance, with the cervix and vaginal walls unusually clean and free of tenacious mucus. This suggested a broader investigation to ascertain if women in general observed any routine for vaginal cleansing.

A group of 1,000 patients were questioned regarding feminine hygiene habits. About 15 per cent readily admitted that they cleansed the vagina in a tub or shower daily, with soap and water, using their fingers to reach up as far as possible into the vagina. None of these patients, of course, had ever been asked this question before, and it is interesting to speculate what effect the appearance of the vagina in these patients may have had on the thinking of gynecologists who assume the vagina cleanses itself. The other 85 per cent were startled by the question. The general fear expressed by this group was that they would be afraid of hurting themselves if they inserted their fingers into the vagina. Many of this same group did admit to using a douche at irregular intervals, using either plain water or one of the proprietary products purchased in a drug store.

In the group of 150 women who washed the vagina regularly there was little evidence of cervicitis or vaginitis, and few gave any history of leukorrhea. Three of the women, over 70 years old, asserted that they had cleansed daily with soap and water for over 50 years. These elderly patients exhibited remarkably healthy-looking cervices and vaginas.

COMMENTS

These observations lead to the belief that almost all women need to clean the vagina by some mechanical scrubbing action, either with the fingers or with a suitable device such as was used in this investigation. Failure to observe vaginal hygiene is strongly suspected of promoting the propagation of the various invaders that cause vaginitis and chronic cervicitis.

The scrubbing method was also applied to patients who were being prepared for vaginal or abdominal surgery. The absence of postoperative vaginal infections and fever in these women suggests that cleansing the vagina before surgery will decrease postoperative morbidity. The possibility of decreasing recurring cystitis by mechanical vaginal cleansing is another avenue of promise for investigation.

SUMMARY

Mechanical vaginal cleansing is a valuable aid in the treatment of vaginitis and cervicitis caused by Trichomonas, Monilia and nonspecific bacteria. When specific medication, such as sulfa creams, seems advisable, the medication can be applied on retiring and the vagina cleansed in the morning, avoiding the discomfort to the patient of wearing a pad during the day. The same routine with mycostatic preparations may also be followed.

Vaginal "scrubbing" shortens the time any medication is necessary. In some cases specific therapy is not needed.

When properly presented, mechanical cleansing is well accepted by patients, insuring good patient coöperation.

"Scrubbing" is especially beneficial immediately following menstruation.

Mechanical cleansing as described here should be practiced during pregnancy because of the increased vaginal secretions at that time.

No harmful or undesirable effects were observed or reported in this series.

CONCLUSIONS

A safe mechanical aid to vaginal cleansing is a valuable addition to methods of treatment, the prevention of vaginal infections, and the elimination of physiologic leukorrhea. Objective observations strongly indicate that regular, proper use of this method will prove highly beneficial. The past teachings of avoidance of any routine vaginal cleansing may require drastic revision, although it may be difficult to discard concepts long held.

Since this study began over 1,000 women have been followed for a period up to three years. There has never been a recurrence of Trichomonas or Monilia infections in women who have continued to mechanically cleanse the vagina daily. Therefore, the conclusion is that Trichomonas and Monilia will not grow in a clean vagina.

1746 K Street, N.W.
Washington 6, D.C.

Peritoneal Dialysis in the Treatment of Uremia*

VINCENT R. PATERAS, M.D.
Fellow in Medicine
MARY F. WATT, M.D.
Assistant Professor of Medicine
NORMAN C. KRAMER, M.D.
Instructor in Medicine
MARSHALL H. JACOBSON, M.D.
Assistant Professor of Medicine
ALVIN E. PARRISH, M.D.
Associate Professor of Medicine
GEORGE WASHINGTON UNIVERSITY SCHOOL OF MEDICINE

PERITONEAL DIALYSIS is a procedure whereby fluid of a known solute content is introduced into the peritoneal cavity, allowed to remain in contact with the peritoneum for a certain period of time, then drained by siphoning. The dialyzing fluid is composed of the major extracellular ions in the same concentrations as normal serum, except that potassium is excluded.

Many methods have been described, some using continuous irrigation, others advocating intermittent dialysis. The indications include uremia,[1-8] hepatic failure,[2,9] severe water and electrolyte abnormalities,[5, 10, 11] and intoxications with salicylates,[12, 13] methanol,[14, 15] boric acid,[16] salt,[11] and barbiturates.[5]

This report summarizes our experience with a method of intermittent dialysis with commercially available dialyzing solutions.

PROCEDURE

The skin of the abdomen is washed with soap and water and then aqueous Zephiran® (1:750). After it is made sure that the patient's urinary bladder is empty a small (1 cm.) skin incision is made in an anesthetized area of the midline about 1 to 2 inches below the umbilicus, and through it a paracentesis trochar is introduced to perforate the peritoneum. Through the lumen of the trochar is introduced a specially constructed, curved polyethylene catheter with multiple perforations and ridges in its distal half.

The tip of the catheter is directed posteriorly, inferiorly, and toward the left or right flank so that its distal end lies in either of the abdominal gutters. The left gutter is usually chosen because it is less likely to be obstructed by fibrous tissue which the right side may show following antecedent attacks of appendicitis and/or appendectomy. Those patients who have an unusually relaxed abdominal wall are first infused intraperitoneally with one or two liters of dialyzing fluid through a large (size 15) needle so as to distend the abdomen. The paracentesis trochar can then be introduced into the abdominal cavity with ease. When the catheter is in place the trochar is removed and a purse-string suture applied to prevent the catheter from slipping in or out of its position, to stop or prevent any bleeding from the skin incision, and to prevent escape of the dialyzing solution from the abdomen. The area is then covered with sterile cloths which are secured with adhesive tape.

---

* From the Departments of Medicine, George Washington University Medical Division, District of Columbia General Hospital, and the George Washington University Hospital, Washington, D. C.

The catheter is connected to the stem of a Y-tube to which two one-liter bottles of the dialyzing fluid are attached, and the latter is allowed to flow into the peritoneal cavity at a fast rate.

The dialyzing solutions, as available commercially,* contain electrolytes of known concentrations (table 1) and sufficient glucose (1.5 or 7 per cent) to bring the osmolarity to 350 mOsm/L or to 675 mOsm/L, respectively. The latter is used when it is necessary to remove fluid from an overhydrated patient. Unless the patient is hyperkalemic potassium must be added to the solutions. Eight mEq. of potassium chloride to one of the two infusion bottles provides a K+ concentration of 4 mEq./L, since both are infused simultaneously. Heparin (1,000 U.S.P. units) is added to one of the bottles in order to prevent clotting within the peritoneal cavity and plugging of the catheter by blood clots. In addition, 25 mg. of tetracycline is placed into one of the bottles. It is wise to add the potassium, heparin and tetracycline to the same bottle in order to reduce the risk of contamination. The two bottles to be used in the first exchange are warmed to body temperature by immersion in a warm bath, connected to the arms of the Y-tube and allowed to flow by gravity into the peritoneal cavity. The infusion should take no longer than seven to ten minutes, after which the inflowing tube is clamped and the fluid is allowed to remain in the peritoneal cavity for one hour. The dialysate is then drained through the same catheter by siphoning into clean, sterile containers on the floor by means of a side arm, connected to the stem of the Y-tube. All fluids recovered from the peritoneal cavity are measured. The procedure is repeated until a total of at least seven exchanges (14 liters) and preferably ten or more exchanges have been infused. Although the tetracycline is added at each exchange, the heparin is discontinued when the return dialysate is no longer grossly bloody.

TABLE 1

Composition of Peritoneal Dialysis Solution

Na	140.5 mEq./L
Cl	101.0 mEq./L
Ca	3.5 mEq./L
Mg	1.5 mEq./L
Lactate	44.5 mEq./L
Glucose	1.5 or 7.0%

RESULTS

The results of 41 peritoneal dialyses on 30 patients are shown in table 2. All patients suffered from uremia due to chronic renal disease. Thirteen patients had ten exchanges, 12 had 12 exchanges, the others had seven to 16 exchanges except one patient, who died after the fifth exchange (no. 25). He had undergone successful dialysis a week previously (no. 24). Two failures were recorded. The first occurred in a young patient with acute uremia and shock in whom the catheter could not be introduced, presumably due to adhesions; the other was discontinued after the first exchange because of lack of coöperation. Neither of these patients is included in this series.

Blood studies. Twelve patients had pre- and immediate postdialysis determinations of serum potassium concentration, and the mean values were 5.08 and 4.44 mEq./L respectively. In those with similar serum sodium studies the values were 134 and 137 mEq./L respectively. The bicarbonate values were 9.3 and 16.4 mEq./L respectively, and the serum protein determinations were 5.1 and 5.5 Gm. per cent respectively. The blood urea nitrogen decreased from a mean of 200 mg./100 ml. to a mean of 134 mg./100 ml.

Analysis of dialysates. The dialysates were measured and analyzed for protein and urea.

---

* These solutions are available from Abbott (Inpersol), Baxter (Dianeal), and Cutter (Peridial).

TABLE 2

Results of Forty-one Peritoneal Dialyses on Thirty Patients

Dialysis No.	Total Proteins (Grams)	Total Ureas (Grams)	Volumes* (ml.)
1	25.50	29.6	−2,380
2	61.4	36.2	−1,500
3	30.7	43.7	−300
4	9.7	56.4	+450
5	19.7	38.6	−280
6	26.4	49.48	+200
7	19.8	51.0	−680
8	14.2	77.2	−2,670
9	24.0	37.5	+700
10	61.6	67.1	+5,500
11	16.0	36.5	−1,060
12	98.1	117.4	−960
13	8.4	43.0	+936
14	43.7	58.1	−1,440
15	—	—	—
16	30.8	51.6	−2,500
17	12.4	81.1	−2,760
18	29.7	28.5	+1,000
19	16.9	39.5	−1,310
20	13.2	42.0	−250
21	9.8	71.0	+1,220
22	14.9	60.6	−2,905
23	15.9	24.2	+7,830
24	16.7	66.9	+1,635
25	7.8	27.5	+485
26	19.8	79.5	−3,635
27	92.8	93.1	−1,345
28	42.8	106.3	−2,390
29	5.3	58.6	−415
30	8.4	43.1	−936
31	7.4	31.2	−305
32	4.4	46.5	−470
33	15.3	59.6	−1,040
34	36.4	58.1	−3,150
35	6.1	54.1	+3,225
36	28.0	89.5	−1,340
37	5.6	41.8	+1,070
38	27.6	50.4	−1,310
39	54.1	39.6	−5,085
40	8.2	67.5	−10,125
41	11.8	104.7	−4,200

* − Indicates negative balance.
+ Indicates positive balance.

A total of 4.4 to 98 Gm. of protein was removed in each case (table 2). Each liter of dialysate removes approximately 1 Gm. of protein except during the first exchange, when an average of 2.5 to 3 Gm. is removed. A total of 24 to 117 Gm. of urea was removed with each dialysis (table 2). With each exchange there was an average of about 2.5 Gm. of urea removed per liter of dialysate. Thirteen patients showed a positive water balance averaging 1,938 ml., while 27 showed a negative balance averaging 1,140 ml. In the case of one patient (no. 15) the total volume was not obtained.

DISCUSSION

The indications for peritoneal dialysis include not only acute and chronic uremia, but intoxications, severe water and electrolyte abnormalities, and hepatic coma. Our criteria for the use of this procedure in renal disease are based on clinical grounds, i.e., deterioration of mental status, the presence of water intoxication and electrolyte abnormalities (especially hyperkalemia and acidosis), and the presence of a possible correctable exacerbation or complication of the existing renal disease.

We have restricted its use almost exclusively to chronic uremia, preferring extracorporeal hemodialysis with the twin-coil artificial kidney in cases of acute uremia. However, peritoneal dialysis has been used in acute cases, in which the artificial kidney is contraindicated by shock or hemorrhagic tendencies.

When indicated and properly used, peritoneal dialysis is an excellent adjunct to the artificial kidney and has many advantages over the latter. The equipment is simple, relatively inexpensive, available commercially, and easily assembled; the procedure requires little preparation and little supervision; it is free of rapid changes in blood pressure or electrolyte shifts and is not associated with the development of abnormalities of the platelets or other clotting factors. The disadvantages are its slow action and the risk of complications, such as the introduction of intraperitoneal infection and intestinal perforation. None of these complications occurred in our series.

Peritonitis and recent abdominal surgery are contraindications to peritoneal dialysis. However, in cases in which peritonitis is thought to be a consequence of the renal disease (as in pyelonephritis or papillary necrosis) or a complication of it (as in hyperkalemia or ruptured renal cyst) this procedure is indicated. Cleve et al[6] successfully used this form of dialysis in two patients who had undergone recent abdominal surgery.

The following are some comments on the results obtained:

Protein. Although there is little doubt that the source of "dialysate protein" is the serum, it is probable that the higher protein extractions in the first and second exchanges are due to the washout of normally occurring protein-containing fluid in the peritoneum and of transudate which some uremics show. Bleeding caused by the paracentesis is usually light and clears by the second or third exchange but is nevertheless a contributing factor. Starch-gel electrophoresis of dialysate protein shows all major fractions of serum proteins.

Patients with a high total protein extraction had ascites. The change in serum protein concentrations from an average of 5.1 to 5.5 Gm. per cent is not significant and cannot be attributed to dehydration. It seems reasonable to conclude that serum protein depletion does not occur with peritoneal dialysis.

Potassium. Despite increases in serum bicarbonate and pH and despite the hyperglycemia which results from the high glucose content of the dialyzing solutions, intracellular potassium continues to escape into the extracellular spaces during peritoneal dialysis with potassium-free solutions. Theoretically, therefore, hypokalemia should not occur until total exchangeable potassium is depleted. Since the determination of total body potassium is not a practical procedure, it is wise to assume that a patient's total body potassium is low and to foresee the possibility of hypokalemia when using potassium-free solutions. It then becomes important to determine serum potassium levels and to observe electrocardiographic changes frequently during the procedure and to add 4 mEq. of potassium per liter of dialyzing fluid as soon as normokalemia occurs.

Water. When the intra-abdominal fluid from the final exchange is drained it is usual for some fluid to remain in the abdomen. On rare occasions sufficient fluid remains to be detectable by physical examination. Hence, any study of water balance would tend to give unreliable results. Nevertheless, patients who are overhydrated will be depleted of excess water rather quickly, and it is not unusual to achieve a negative water balance of up to two liters with the first exchange. On the other hand, dehydration corrects more slowly, possibly because of the relatively high osmolality of the dialyzing fluids. The "post-dialysis anuria" which is common following the use of the artificial kidney does not occur after peritoneal dialysis, possibly because of the persistence of azotemia at the end of the procedure.

Urea. Urea is freely diffusible through all fluid compartments of the body, and therefore the amount removed by dialysis is related to the initial blood urea nitrogen and to the number of exchanges. Using this solute as a measurement of the efficiency of the peritoneum as a dialyzing surface, we have limited the period of equilibrium to a maximum of one hour, because by the end of this period equilibrium is 80 per cent complete. This is in agreement with Boen,[8] who has shown that the concentration ratio between dialysate and blood reaches 50 per cent in 20 minutes and 100 per cent in two hours. It seems unwarranted to prolong the period of equilibrium beyond the first hour.

Clinical changes. We were unable to establish criteria for the clinical response to be expected from peritoneal dialysis, but many parameters were not measured, such as phosphates, creattinine, amino acids, and peptides.

Some patients showed no clinical improvement, while others were sufficiently helped to be discharged, despite the fact that some of these were moribund at the onset of the procedure. The improvement occurred early in the procedure in some cases, especially when water intoxication played a part in the patient's symptoms; in other cases, the patient showed no change in his clinical status until late in the procedure or many hours after it was discontinued; this is not thought to be related to postdialysis therapy. We may postulate that intracellular water and electrolyte readjustments occur during this latent period, but no significant blood chemical changes were detectable, except for a sudden rise in the blood urea nitrogen which nevertheless occurred in almost all patients within 24 hours after the end of dialysis.

CONCLUSIONS

Intermittent peritoneal dialysis is a safe and effective method of filtering water and crystalloids into or out of body fluid compartments through the semipermeable peritoneal membrane. The procedure is simple. Although it is not intended to replace the artificial kidney, it has many advantages over the latter. It can be used in chronic uremia or in acute uremia when extracorporeal hemodialysis with the artificial kidney is contraindicated because of hemorrhagic diathesis or shock.

REFERENCES

1. Grossman, L. A., Ory, E. M., and Willoughby, D. H.: J.A.M.A., 1947, **135**, 273.
2. Pearson, C. C.: Proc. Mayo Clin., 1947, **22**, 314.
3. Hepworth, R. G.: Canad. Med. Ass. J., 1959, **80**, 368.
4. Doolan, P. D., and others: Amer. J. Med., 1959, **26**, 831.
5. Maxwell, M. H., Reckney, R. E., Kleeman, C. R., and Twiss, M. R.: J.A.M.A., 1959, **170**, 917.
6. Cleve, E. A., Smith, F. P., and Hensler, N. M.: Amer. J. Med. Sci., 1960, **240**, 319.
7. Fisher, R. G., and Finigan, M.: J. Neurosurg., 1961, **18**, 535.
8. Boen, S. T.: Medicine, 1961, **40**, 243.
9. Jones, R. C., Stradeo, L. D., and Berry, W. E.: U. S. Armed Forces Med. J., 1957, **10**, 977.
10. Scheierson, S. J.: Amer. J. Med. Sci., 1949, **218**, 76.
11. Miller, N. L., and Finberg, L.: New Engl. J. Med., 1960, **263**, 1347.
12. Etteldorf, J. N., and others: J. Pediat., 1961, **58**, 226.
13. Elliott, G. B., and Crighton, J. U.: Lancet, 1960, **2**, 840.
14. Stinebaugh, B. J.: AMA Arch. Intern. Med., 1960, **105**, 613.
15. Shinaberger, J. H.: Ibid., 1961, **108**, 937.
16. Segar, W. E.: New Engl. J. Med., 1960, **262**, 798.

Lung Function Tests in Diagnosis[*]

HAROLD M. SILVER, M.D.

Director of Pulmonary Laboratory, George Washington University Hospital; Assistant Clinical Professor of Medicine, George Washington University School of Medicine

YUTAKA OHSAKI, M.D.

Fellow in Pulmonary Diseases, George Washington University School of Medicine

THERE HAS BEEN A PEACEFUL REVOLUTION in the field of pulmonary diseases in the last ten years. Chronic nontuberculous chest diseases such as emphysema have superseded tuberculosis as the most important pulmonary problem in the average physician's practice. The symptoms produced by this type of disease are primarily the results of abnormal lung function. Just as he needs at least a complete blood count to diagnose and treat a patient with anemia, the physician now needs pulmonary physiologic tests to determine the extent and type of functional impairment in his patient with chronic lung disease.[1] Such need has become clear as the limitations of radiologic and physical diagnostic methods have become painfully apparent.

However, the general understanding and application of pulmonary function tests have been hindered by technical complexity and excessive mathematical elegance. The present discussion will be limited to spirometry and arterial blood gas analyses which ordinary physicians such as we who do not have working knowledge of calculus or electrical engineering or Ph.D.'s in chemistry can use for diagnosis.

The basic function of the lung is to remove oxygen from the inhaled air to transfer it to the pulmonary capillary blood and to remove the carbon dioxide which is formed in the tissues from the pulmonary capillary bed. The function which involves moving the gases from environment to and from the alveoli is referred to as ventilatory. The portion which involves transfer between the alveoli and the pulmonary capillary is referred to as alveolorespiratory.

VENTILATORY TESTS

To evaluate the ventilatory phase we use tests which determine the subject's ability to move air to the alveoli at a normal energy cost. If there is excessive energy cost, as a result of impaired mechanics, dyspnea will result. The oldest ventilatory measurement is the vital capacity, which consists of taking a deep breath in and then blowing it out as completely as possible. There is emphasis on completeness of blowing out, not on speed of so doing. This is a test of the maximal range of air movement and thus indirectly of the pressure and volume characteristics of the chest. Thus, if the lungs are less elastic, i.e., "stiff," the volume moved, the vital capacity, is reduced (see figure 1). These types of change which are usually well diagnosed by decrease in vital capacity are grouped under the general heading of restrictive diseases. These are listed in table 1.

The second portion of the ventilatory tests is typified by the maximum breathing capacity (MBC), also now called maximum voluntary ventilation (MVV). This is done by having the patient breathe fast and deep for 12 to 15 seconds. It is primarily a test of airway obstruction.

---

[*] Delivered in part at the 29th ANNUAL SCIENTIFIC ASSEMBLY of the Medical Society of the District of Columbia in Washington, D. C., November 28, 1961.

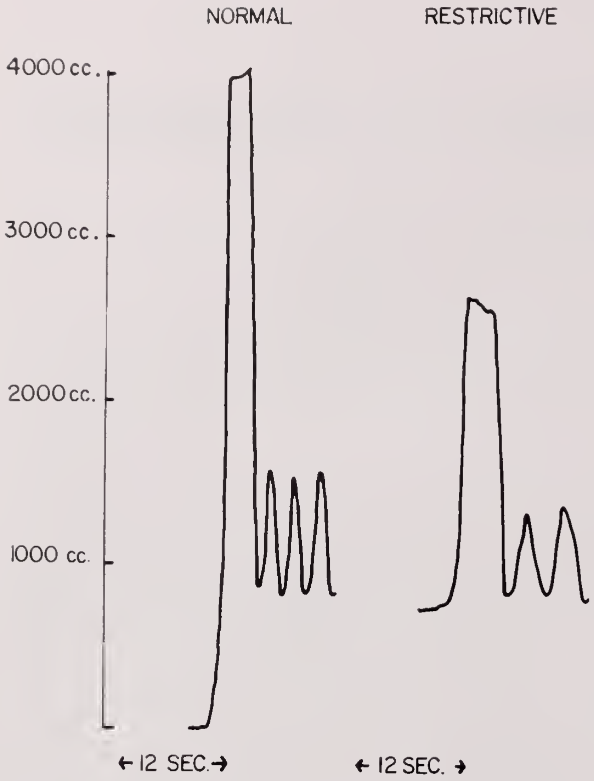


FIG. 1. Vital capacity. The normal tracing is on the left. The vital capacity predicted was 4,010 c.c., found 4,130 c.c., or 103 per cent of predicted. On the right is the vital capacity of a patient with a restrictive disorder, poliomyelitis. Predicted value was 4,590 c.c., found 2,080, or 45 per cent of predicted.

The term obstruction is used to indicate both anatomic narrowing of the airways and dynamic narrowing of airways. This test was introduced because it was found that the vital capacity alone could be normal in patients with certain severe lung diseases such as emphysema. On the other hand, tests with extremely rapid air flow reflect diameter, and MBC is such a test. The graphic record obtained during MBC is shown in figure 2. The normal subject's rapid breaths are at the same level as the tidal volume. In addition to the smaller volume in the airway obstructive disorder there is air-trapping. By this we mean that the level is higher than that of quiet breathing. We can measure not only extent of disability, but we can also measure degree of ready reversibility. This is done by administering an aerosol bronchodilator. The main airway obstructive diseases are emphysema, chronic bronchitis, and asthma.

More recently it has been appreciated that a key-limiting factor in early portions of maximally forced expiratory vital capacity is airway diameter.[2] In this maneuver the patient takes a maximal breath in and blows it out as rapidly as possible. Standards have been set for the proportion which is normally blown out in the various intervals of time. If obstruction is present the percentage of vital capacity blown out in these intervals is decreased (figure 3). Studies have been made to determine how these compare with MBC,[3] and further studies are in progress. For the purposes of this discussion we would prefer to say that MBC and one early FEV should be measured for most careful documentation. All of these ventilatory tests may be done on an instrument called a respirometer, and the process of doing them is called spirometry. Diagnostic evaluation of most chronic lung

TABLE 1

Causes of Restrictive Pulmonary Function Impairment

- I. Loss of lung volume
  - A. Surgical removal of lung tissue
  - B. Fluid in pleural space
  - C. Air in pleural space
  - D. Diaphragm abnormally elevated
- II. Loss of lung elasticity
  - A. Localized
    - 1. Fibrosis postinfection
    - 2. Pleural fibrosis
  - B. Generalized
    - 1. "Fibrosis"—sacroid, Hamman-Rich syndrome, scleroderma, alveolar proteinosis, alveolar-cell carcinoma, miliary tuberculosis and histoplasmosis, asbestosis, irradiation fibrosis
    - 2. Pulmonary vascular congestion
- III. Chest-wall factors
  - A. Loss of power
    - 1. Poliomyelitis
    - 2. Landry type of polyneuronitis
    - 3. Amyotrophic lateral sclerosis
  - B. Loss of elasticity
    - 1. Obesity heart-lung disease
    - 2. Scleroderma
    - 3. Rheumatoid spondylitis

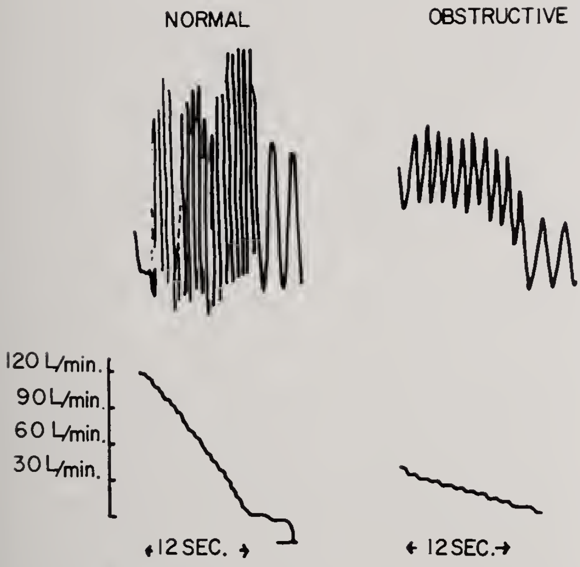


FIG. 2. Maximum breathing capacity. The normal tracing is on the left, with a summation of each breath on reduced scale below it—predicted 120 L/min., found 122.5 L/min. or 102 per cent. On the right is a record from a patient with advanced emphysema—predicted 101 L/min., found 24.5 L/min. or 24 per cent.

diseases may be made with these ventilatory parameters because such diseases either decrease total space, elasticity, or airway diameter. And if the disease is advanced enough to bring the patient to the doctor, the disease is usually extensive enough to give data outside the normal range of variability.

ALVEOLAR-RESPIRATORY TESTS

Lung-function disorders which do not have these characteristics can be missed by ventilatory tests because pulmonary mechanics are normal or close to it. Examples of diseases which produce disorders of the alveolorespiratory phase of lung function and which can be missed by spirometry alone include diseases of the pulmonary vascular bed as seen in multiple small pulmonary emboli or primary pulmonary hypertension. They include diseases which produce thickening of the barrier between the alveolar lumen and the pulmonary capillary lumen. This latter gives rise to a diffusion impairment, the "alveolocapillary block" syndrome.[4] To detect these alveolorespiratory disorders we analyze arterial blood, since the final test of the respiratory apparatus is the maintenance of normal arterial O_2 and CO_2 levels during rest and exercise. The normal arterial blood gas values are seen in table 2.

TABLE 2

Normal Arterial Blood Gas Values

Oxygen content	19 volumes per cent
Oxygen capacity	20 volumes per cent
Oxygen saturation $\frac{O_2\ \text{Content}}{O_2\ \text{Capacity}} \times 100$	95 per cent
pH	7.40
Carbon dioxide content	47 volumes per cent
pCO_2	40 mm. Hg

In certain of the pulmonary fibroses with diffusion defect spirometry may be normal, but O_2 saturation, normal or low at rest, decreases precipitously with limited exercise. The O_2 saturation moves up to 100 per cent when 100 per cent oxygen is inhaled. Because CO_2 is 20 times more diffusible than O_2 and because reflex hyperventilation usually accompanies pulmonary fibrosis, CO_2 is usually normal or low despite the presence of severe anoxemia.

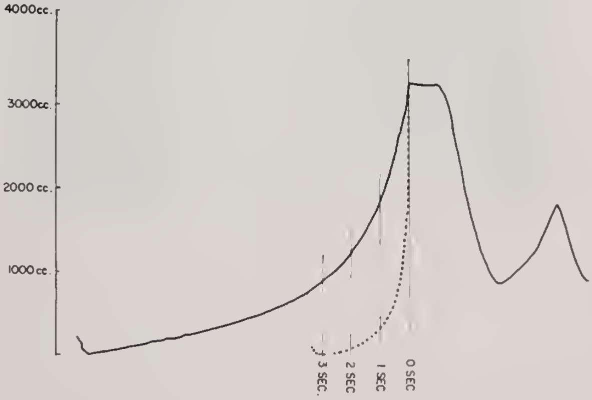


FIG. 3. Timed vital capacity (using rapid speed). The tracing from a patient with asthma reveals excessively slow expiration despite maximal effort. FEV_1,* 1 sec. was 44 per cent; FEV_2, 1 sec. was 62 per cent; FEV_3, 1 sec. was 73 per cent. The normal tracing (dotted line) should have values in excess of 80 per cent, 92 per cent and 95 per cent, respectively.

A case is presented (figure 4) in which a dyspneic patient had a perfectly normal spirometry in terms of volumes and contours. O_2

---

* Forced expiratory volume.

saturation, however, was low at rest and dropped appreciably after one minute of exercise. CO_2 was low. This case demonstrates how a generalized lung disease, in this case interstitial fibrosis, may not give ventilatory abnormality but may give blood-gas abnormalities.

Similarly, in the right-to-left shunt, as in AV fistula, spirometry may be normal but arterial O_2 saturation often decreased at rest or exercise. The important differential point to detect shunting, however, is that after inhaling 100 per cent O_2, saturation is not complete. CO_2, on the other hand, remains normal under such circumstances, as compensation for the increased CO_2 content of the shunted blood is possible.

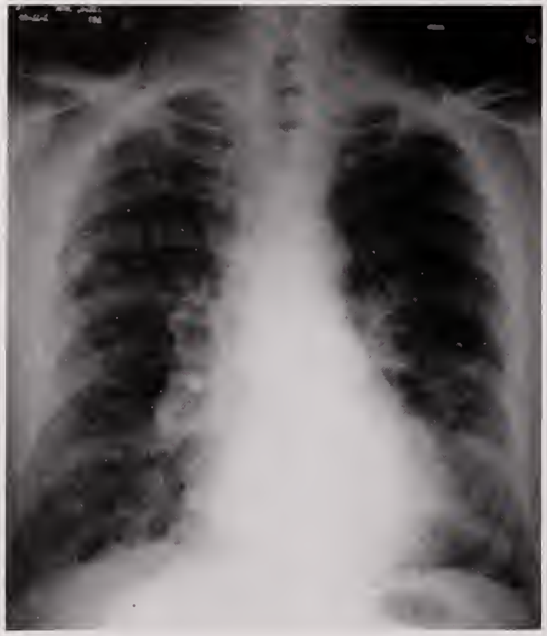


FIG. 4. Chest X-ray of J. H., a patient with interstitial pulmonary fibrosis. The data were:

	Predicted	Found	Per cent of Predicted
Vital capacity..........	3,620 c.c.	2,718 c.c.	102
3-second-timed vital capacity.............	95%	97%	
Maximum breathing capacity..............	103 L/min.	115 L/min.	112
Arterial O_2 saturation at rest................	95%	91%	
Arterial O_2 saturation at exercise (1 minute)....	95%	85%	
Arterial CO_2 content at rest.................	47 vol. %	39.4 vol. %	
Arterial CO_2 content at exercise (1 minute)...	47 vol. %	39.1 vol. %	

Even when spirographic data are abnormal the blood gas studies are often desirable for further quantitation. For example, when a patient with obstructive disease has marked impairment he usually develops arterial O_2 unsaturation at rest or at exercise. As the disease proceeds further CO_2 retention may develop. The finding of a high pCO_2 indicates that the alveoli which are in contact with the pulmonary capillary bed are being underventilated. In this type of case the underventilation is due to poor distribution of the inhaled, low CO_2 air with respect to the high CO_2 air of the alveoli. The finding of an elevated pCO_2 has important therapeutic and prognostic implications. In addition, serial determinations of arterial blood gas concentrations are of value to assess effectiveness of therapy.

INDICATIONS FOR TESTS

These two types of tests, ventilatory to measure air-moving ability and arterial O_2 and CO_2 analysis to measure net results of respiration, enable us to define the presence and degree of physiologic derangement in lung disorders. The tests are useful also in evaluating response to therapy. They are helpful in the differential diagnosis of cardiac from pulmonary dyspnea, because the reduction in spirographic parameters in primary heart disease is much less than one would expect on the basis of the dyspnea, and CO_2 retention does not usually occur in heart disease. In the diagnosis of polycythemia O_2 unsaturation at rest or exercise is usually a criterion for the secondary form. In primary polycythemia O_2 saturation is usually normal unless complications are present. We have also increasingly been asked to evaluate patients before thoracic or abdominal surgery, both to estimate risk and resection tolerance. Fluoroscopy or bronchospirometry may be required when lateralization is an important aspect in decision.

These pulmonary function tests require the least of equipment and physician's time and are practical as well as useful. Although our discussion is limited to them for the purposes of simplicity and clinical utility, we do not wish to imply that this is the totality of possible or useful pulmonary tests. We are very much interested in the residual volume, pressure-volume relationships, fine details of distribution and gas exchange, and diffusing capacity of the lungs. Such tests are employed in special situations and for teaching and research. The reader is referred to texts on the subject[5, 6] should he desire more detailed material in the field of lung physiology.

Having indicated the uses of these lung-function tests, it behooves us to indicate limitations. These limitations are inherent because the techniques are not radiologic, histologic, or microbiologic. For example, we cannot detect a minimal lesion, i.e., minimal tuberculosis, because it involves too little of the lung to be reflected in the overall tests. We cannot tell what the lesion is; i.e., we can identify pulmonary fibrosis with diffusion block but not be able to tell which of the etiologies, sarcoid or Hamman-Rich, etc., have produced it. We cannot tell where the lesion is. We may be able to demonstrate a shunt but be unable to say where in the heart or lung it is, without other types of examination.

Epilogue

Finally, pulmonary function tests are not a substitute for good, careful clinical medicine. The subtle cutaneous lesion of sarcoid, the telltale retinal tubercle, the localized unilateral wheeze of occult carcinoma—these are findings of good clinical medicine. If preoccupation with pulmonary physiology causes us to ignore these, medicine will be poorer. But when practical pulmonary physiology is coupled with sound clinical evaluation, new heights of diagnostic and therapeutic acumen may be achieved.

REFERENCES

1. Baldwin, E. deF., Cournand, A., and Richards, D. W., Jr.: Pulmonary insufficiency; physiological classification, clinical methods of analysis, standard values in normal subjects. Medicine, 1948, **27**, 243.
2. Gaensler, E. A.: Analysis of ventilatory defect by timed capacity measurements. Am. Rev. Tuberc., 1951, **64**, 256.
3. Miller, W. F., Johnson, R. L., Jr., and Wu, N.: Relationships between fast vital capacity and various timed expiratory capacities. J. Appl. Physiol., 1959, **14**, 157.
4. Austrian, R., and others: Clinical and physiologic features of some types of pulmonary diseases with impairment of alveolar-capillary diffusion; syndrome of "alveolar-capillary block." Amer. J. Med., 1951, **11**, 667.
5. Comroe, J. H., Jr.: The Lung. Chicago: Yr. Bk. Pub., 1955.
6. Knowles, J. H.: Respiratory Physiology and Its Clinical Application. Cambridge, Mass.: Harvard, 1959.

Perforation of Malignant Lesions of the Colon

J. RICHARD THISTLETHWAITE, M.D.

Associate Clinical Professor of Surgery, George Washington University School of Medicine

EDWARD E. CORNWELL, JR., M.D.

Instructor in Surgery, Howard University College of Medicine

PERFORATION OF THE BOWEL may give rise to the first clinical signs of a malignant lesion of the colon or rectum. In such instances the perforation may occur at the site of the malignant growth or proximal to the growth as a diastatic perforation of the cecum. Usually, perforation of the bowel is secondary to colonic obstruction, but perforation of the bowel may occur at the site of a malignant lesion with or without obstruction when the growth outgrows its blood supply and weakens the bowel wall. In the past few years we have encountered several patients with perforated carcinomas of the colon and rectum, and the experience gained from their management forms the basis of this report.

Approximately 3 per cent of carcinomas of the colon perforate. Cawkwell[1] reported an incidence of 3.2 per cent in 188 cases of carcinoma of the colon and Mershiemer and Miller[2] a 3 per cent incidence in 700 cases. The latter authors noted that 85 per cent of the perforated cases had perforated at the site of the carcinoma, and in 15 per cent the perforation was proximal to the lesion. J. C. Goligher and F. G. Smiddy[3] reported 409 patients with carcinoma of the colon and rectum over a 15-year period. Of this group of cases, 90 had evidence of perforation. In most instances the perforation was small with only localized peritonitis and abscess formation. However, in 20 cases the perforation was secondary to colonic obstruction, in which case the perforations led to massive peritoneal soilage and peritonitis.

Cawkwell postulates three ischemic factors that predispose to a perforation of the colon at the site of a malignant growth: (1) Tumor tissue invades through all layers of the colon, then outgrows its blood supply and leads to necrosis of the bowel wall; (2) the high intraluminal pressure resulting from mechanical obstruction compresses the intraluminal vessels supplying the carcinomatous area; (3) in far-advanced obstruction intravascular thrombosis may result in transluminal passage of bacteria and toxic products through the diseased bowel wall. Any one or any combination of these factors may be present to predispose to perforation. The last two factors obtain only when there is complete colonic obstruction. Perforation at the site of the lesion when obstruction is not present is most common in the ascending colon where the lesions are typically bulky, friable, and associated with secondary infection.

Diastatic perforation, or perforation proximal to the lesion in the colon, almost always occurs in the cecum.[4] Wangensteen[5] has demonstrated that other than the stomach the cecum is the most vulnerable part of the intestinal tract to perforation from increased intraluminal pressure.[1] The closer the proximity of the obstructing lesion to the cecum, the more likely a diastatic perforation will occur providing the ileocecal valve is competent. Obstructing lesions in the proximal colon are unusual, but when a napkinring type growth occurs in the right side of the colon or hepatic flexure area and produces obstruction, prompt surgical relief of the obstruction is mandatory. This situation, if untreated, may lead rapidly to diastatic perforation with massive peritoneal soilage and almost certain death. Free air in the peritoneal cavity may be noted on upright or decubitus films of the abdomen in cases of diastatic perforations of the cecum. In such a situation the clinical appearance of the patient may mimic a perforated ulcer.

Perforation of the colon at the site of a malignant process may be massive and produce diffuse peritonitis, or it may be a slow leak giving rise to an abscess or occasionally a fistula. Since the inflammatory process is the main clinical feature in such instances, the underlying malignant lesion may not be suspected.[6] The preoperative diagnosis is frequently in error, with such conditions as appendicitis, diverticulitis, and acute cholecystitis being suspected. Indeed, at the time of laparotomy the diagnosis may be difficult to establish. Inflammatory lesions of the colon with associated abscess formation such as are seen with diverticulitis and perforations of the colon by foreign bodies can closely resemble carcinoma grossly. Conversely, a perforated malignant tumor with abscess formation may be easily confused with a benign inflammatory process.

The surgical treatment for uncomplicated carcinomas of various segments of the colon is well standarized, but this is not entirely true for perforated lesions. In general, the primary consideration in perforated lesions should be directed toward control of the peritonitis and abscess formation and the treatment of the malignant process reserved for a later date. Proximal decompression of the bowel by colostomy and drainage of intra-abdominal abscesses usually constitutes the initial surgical attack on perforated left-sided colon lesions. Resection of the malignant lesion is accomplished later as an elective procedure. Perforated lesions of the left side of the colon can also be treated by exteriorization and resection. For perforated lesions of the right side of the colon primary resection with anastomosis has been utilized. There have been no deaths from peritonitis in our group of cases. All have received careful supportive care, including the use of antibiotics.

Perforation of a carcinoma has been considered an ominous sign, indicating a poor prognosis as to cure. Obviously, when perforation occurs at the site of the tumor, it indicates that the growth has involved all layers of the bowel. Such lesions are classified as Duke's C and correspondingly will be associated with a poor prognosis. The outlook is not entirely hopeless; some patients can be salvaged. Unless there is definite evidence of dissemination or metastases the treatment of perforated lesions should be designed to not only control the immediate threat to life from peritonitis but should also attempt to totally eradicate the malignant process.

Most of our cases have been operated upon too recently for evaluation as to five-year survival. More than one-half of the patients with a postoperative period of three years or more have succumbed to progression of their disease. Two patients are alive and show no evidence of residual or recurrent disease 42 months and 36 months postoperatively. It would appear at this date, from our material, that perforation of carcinoma of the colon indicates a poor prognosis but not necessarily a hopeless outlook.

ILLUSTRATIVE CASES

Case 1. A 42-year-old Negro was admitted to the hospital with the chief complaint of persistent right lower quadrant pain for one week. Approximately two months prior the patient had noted intermittent right lower quadrant pain, loss of appetite, and bouts of diarrhea. Because of these complaints a barium enema had been performed three weeks prior to admission which demonstrated an apparent malignant lesion in the cecum with extraluminal extravasation of the barium. The patient at first refused hospitalization, but when he developed persistent pain, chills and fever, abdominal distention, and vomiting, he consented. He appeared both acutely and chronically ill with a temperature of

39.6°C. At operation the mass proved to be a large carcinoma of the cecum, complicated by an abscess which extended into the retroperitoneal space in the right gutter. This abscess contained approximately 500 c.c. of purulent material. A hole in the lesion in the cecum directly communicated with this abscess cavity. Resection of the right half of the colon was accomplished and the retroperitoneal space drained. Antibiotic therapy was continued in the early postoperative course. The wound healed per primam and the patient recovered without complications. A follow-up visit 26 months postoperatively showed the patient to be in a good state of health with no evidence of either residual or recurrent disease.

Case 2. A 72-year-old woman was admitted to the hospital with a three-day history of right upper quadrant pain with associated nausea and vomiting. There was no history of previous abdominal complaints. The patient appeared to be acutely ill with a temperature of 38.2°C. There was a mass in the right upper quadrant which was tender with associated tenderness in both the right upper and right lower quadrants and muscle guarding and rebound tenderness. The white blood cell count was 13,600, and the serum amylase was within normal limits. A presumptive preoperative diagnosis of acute cholecystitis with perforation of the gallbladder was entertained. An emergency operation was recommended. When the abdomen was opened generalized feculent peritonitis was encountered. The abdominal mass proved to be carcinoma of the transverse colon which was leaking fecal material into the peritoneal cavity. Toilet of the abdominal cavity was obtained by irrigating with several liters of saline solution. A primary resection of the right half of the colon and the transverse colon with ileocolostomy was accomplished. The right gutter was drained through a stab wound in the flank. Polyethylene tubes were inserted in the peritoneal cavity through needle puncture wounds and antibiotics introduced directly into the peritoneal cavity during the first five days of the postoperative period. The patient recovered without complications and was discharged from the hospital on the fourteenth postoperative day. Approximately two years following the operation he succumbed to coronary thrombosis. An autopsy was performed which showed there was no evidence of either residual or recurrent carcinoma of the colon.

COMMENT

The cases represent perforated carcinomas of the right side of the colon without evidence of obstruction. In the first case the leakage had been slow with the formation of a large abscess without associated peritonitis. In the second case the perforation caused massive soilage of the peritoneal cavity and diffuse peritonitis. In each instance a right colectomy was accomplished with primary anastomosis. In lesions of the right side of the colon with perforation and peritoneal contamination control of the peritonitis is best accomplished by removal of the perforated portion of the colon, rather than attempting defunctionalization of the bowel by ileostomy. Primary anastomosis can usually be successfully accomplished and an exteriorization procedure avoided. Drainage, antibiotics, and supportive care will aid in the control of the associated infection.

Case 3. A 66-year-old white woman was admitted to the hospital with a three-day history of severe abdominal pain, fever, and anorexia. She had also had difficulty in defecation for two or three months. She appeared acutely ill. The temperature was 39°C; the abdomen was tender throughout, with guarding in all quadrants and muscle rigidity in the left hypochondrium. Needle aspiration in all quadrants of the abdomen failed to obtain any fluid. A clinical diagnosis of diffuse peritonitis was made, and the patient was prepared for surgery. After she had been anesthetized a firm mass was palpated in the left mid-abdomen. A feculent odor was noted as the abdomen was opened. Small amounts of purulent fluid and fibrin were present in loculated areas between loops of bowel. A carcinoma of the descending colon was encountered. In the adjacent mesentery there was a large mass 10 by 16 cm. which was aspirated and found to contain pus. Apparently the carcinoma had ruptured into the mesentery with the formation of this abscess, which in turn was macroscopically leaking to produce the diffuse peritonitis. An exteriorization resection of the descending colon was accomplished so as to excise a wide length of it and also the adjacent mesentery containing the large abscess. The postoperative course was uneventful. Intestinal continuity was reëstablished three weeks after the initial procedure. The patient is alive and well 24 months postoperatively.

Case 4. A 44-year-old Negress was admitted to the Gynecological Service of the hospital because of abdominal distention and a mass in the left adnexal region. The patient had noted progressive abdominal distention over a two-week period and had also experienced increasing difficulty in having a bowel movement during the same period of time. An upper gastrointestinal X-ray examination was performed at the onset of these complaints with negative findings. An X-ray film of the abdomen at the time of admission demonstrated some of the barium still present in the colon. The colon was distended, but no gas or feces was present in the rectum. A large, firm, fixed mass was palpated in the left adnexal region on pelvic examination. The patient was operated upon with the preoperative diagnosis of ovarian carcinoma with probable peritoneal implants. At laparotomy a carcinoma of the sigmoid portion of the colon was found. This had perforated, and adjacent to it was an abscess cavity containing feces and purulent material. An obstructive resection of the descending colon and the sigmoid portion was accomplished, and the abscess cavity was drained. At a later date intestinal continuity was reëstablished. The patient is living and free of any evidence of recurrence or residual disease 42 months postoperatively.

COMMENT

Cases 3 and 4 are similar, each having a perforation of a cancer of the left side of the colon. In both cases large localized abscesses were formed without too much contamination of the general peritoneal cavity. Treatment in each was carried out by exteriorization resection and drainage. An adequate cancer operation was accomplished by wide resection of the bowel and the adjacent mesentery. The inferior mesenteric artery was ligated at its take-off from the aorta. The presence of infection and obstruction make primary resection with anastomosis inadvisable in cases of perforated carcinoma of the descending colon. When it is technically possible to do an adequate cancer operation by exteriorization resection, it should be the procedure of choice for obstructed, perforated cancers of this portion of the colon. This procedure accomplishes both adequate removal of the tumor and elimination of the source of the infection. Localized abscesses are drained. Intestinal continuity can then be reëstablished at a later date.

Case 5. A 40-year-old Negro was admitted to the hospital after being treated and discharged from another hospital for an episode of intestinal obstruction. Within a few days of discharge he again experienced difficulty passing stools, became febrile, and was admitted with obvious signs of peritonitis. On rectal examination a large ulcerated lesion could be felt, almost encircling the circumference of the rectum. In the center of this lesion there was a hole through which the examining finger could be inserted. This led to the perirectal space and into a cavity which apparently communicated with the peritoneal cavity to account for the peritonitis. The patient was promptly prepared for operation and a sigmoid colostomy established. There was a large abscess in the cul-de-sac which was drained from above and also into the rectum through the perforation in the carcinoma. After a stormy, septic course, the patient recovered, and one month later an abdominal perineal resection was performed. He died five months later with carcinomatosis and massive perineal recurrence.

Case 6. A 76-year-old white man was admitted to the hospital with a tender mass in the left lower quadrant felt just beneath the skin. He gave a history of symptoms compatible with progressive colonic obstruction for a few weeks. The mass was red, tender, and fluctuant. It contained feculent pus, and following drainage a cutaneous fecal fistula became established. An obstructing lesion was demonstrated in the sigmoid portion of the colon by X-ray examination. A transverse colostomy was performed, following which the abscess in the left flank healed and the cutaneous fecal fistula closed. The carcinoma was later resected, and no attempt was made to make an anastomosis since the area was still contaminated. The rectal stump was closed off and the proximal portion of the colon resected back to the colostomy site. Within a few months there was obvious recurrence, with a tumor growing out of the old fecal fistula site. Multiple courses of 5-hydroxy-fluorouracil resulted in gross regression of the tumor, but regrowth followed promptly each course of treatment. The patient died ten months following resection.

COMMENT

In cases 5 and 6 the perforated lesion was located low in the bowel, in the lower sigmoid region in one and in the rectum in the other. In both cases abscesses had formed and in one it drained by *necessitatus* through the skin. Since it is difficult to treat low lesions by exteriorization resection, in each instance a proximal colostomy and abscess drainage was accomplished. With fecal diversion the sepsis was controlled, allowing a definitive resection at a later date. It is interesting that in both of these cases there was prompt recurrence of the malignant lesion after resection, indicating inadequate local removal of these tumors. Prompt recurrence has not been observed in the ascending or the descending colon when treatment has been by initial resection rather than by proximal colostomy and delayed resection. This experience may indicate that it is best to resect the perforated lesion at the primary operation whenever feasible rather than by delaying resection as is done when proximal colostomy is performed. Obviously, no conclusion can be made in this regard since low-lying rectal lesions have a far poorer prognosis than cancer elsewhere in the colon.

Case 7. A 63-year-old white man was admitted to the hospital with a story of abdominal cramps and distention for eight days. He had not passed gas per rectum or had a bowel movement during this time. Twenty-four hours before admission he developed severe pain in both lower quadrants with chills and fever. He appeared acutely ill; his temperature was 38°C, and the pulse rate was 130. The abdomen was greatly distended, tympanitic, and diffusely tender with rebound tenderness in all quadrants. X-ray films of the abdomen demonstrated free air under both hemidiaphragms and massive gaseous distention of the entire colon to about the midsigmoid region, where the gas abruptly stopped. The patient was prepared for immediate surgery. An obstructing lesion was found in the sigmoid portion of the colon, and there was a diastatic perforation of the cecum. Many necrotic pin-point openings in the distended cecum were leaking fecal material into the peritoneal cavity. There was a marked feculent peritonitis with approximately 500 c.c. of feculent material in the pelvis and right lower quadrant of the abdomen. The cecum was exteriorized and cecostomy performed. Parenteral and intraperitoneal antibiotics by way of polyethylene catheter were given. After a stormy, early postoperative course the patient recovered, and four weeks later the sigmoid portion of the colon was resected and the cecostomy closed. The patient is alive ten months postoperatively but probably has metastatic liver disease.

Case 8. A 68-year-old white woman was admitted to the hospital with the chief complaint of abdominal cramps for two days. The pain was followed by abdominal distention, obstipation, and then vomiting, which became feculent in character. She had experienced a similar episode two months before which lasted only 24 hours. During the two weeks prior to admission streaks of blood had been noted on the stools. The findings on physical examination confirmed the presence of intestinal obstruction. However, the pulse rate was 120 and the temperature 38°C. The white blood cell count was 14,600, and X-ray examination of the abdomen showed multiple gas-filled loops of small bowel. No gas was noted in the colon. At operation the patient was found to have a feculent peritonitis with bowel contents leaking through a perforated carcinoma in the cecum. This lesion did not encircle the bowel and obviously was not obstructing it. On further search an obstructing carcinoma of the left side of the transverse colon was found. Obstruction by this lesion accounted for the small bowel distention through an incompetent ileocecal valve and also produced a diastatic perforation of the cecum through the wall weakened by the cancer in the cecum. Both lesions were resected by removing the entire ascending and transverse portions of the colon and making an ileocolonic anastomosis to the descending colon. The patient expired 13 months later of carcinomatosis.

COMMENT

Cases 7 and 8 represent instances of diastatic perforation of the colon. In each case a carcinoma in the left side of the colon produced obstruction and the back pressure within the lumen of the bowel produced perforation of the cecum. In the second case this perforation occurred through an additional carcinoma located in the cecum. Diastatic perforations of the cecum are rather unusual, most perforations occurring at the site of the malignant growth. However, they are a more serious problem, because the bowel literally decompresses itself by emptying into the peritoneal cavity. A competent ileocecal valve is necessary to produce a closed loop and a diastatic perforation of the cecum. The enormous distention of the cecum causes pressure necrosis of the intestinal wall, and perforation usually occurs through multiple small holes rather than through a large opening as a result of bursting. Free air under the diaphragm may be demonstrated on X-ray films. Treatment of diastatic perforations of the cecum must provide immediate control of the peritoneal soilage. This is best accomplished by exteriorizing the cecum and performing tube cecostomy. Toilet of the abdominal cavity, liberal use of antibiotics, bed rest, and intestinal decompression aid in control of the peritonitis. Resection of the obstructing carcinoma is reserved for a later date.

(*Continued on page 564*)

Osteopetrosis

WILLIAM B. McAVOY, M.D.

Radiologist, Memorial Hospital, Monongahela, Pennsylvania

WILLIAM W. STANBRO, M.D.

Professor of Radiology, George Washington University School of Medicine

OSTEOPETROSIS is a condition of the osseous system in humans in which the diagnosis is usually made by means of roentgen examination. In addition, it is a relatively rare disease. These two facts make it seem worthwhile to publish a report of a relatively large collection of cases of this entity which we have encountered. This seems especially desirable since Kneal and Sante[1] in 1951 stated that "The very rarity of the disease requires reports of all cases in order that as much material is available for study as possible."

This report deals with nine cases of osteopetrosis found in three generations of a single family.

This disease was first reported in 1904 by Albers-Schönberg,[2] who referred to the condition as "*Marmorknocken*" or "marble bones." This term was applied to the bones strictly on the basis of their very dense appearance on roentgenograms rather than with the implication that the bones of his patient gave evidence of having the structural strength of marble. Albers-Schönberg's patient was a male merchant aged 26 when the disease was discovered. He was followed for some 11 years, at which time he was found to be still active but with a hemoglobin of only 30 per cent. Karshner[3] in 1926 suggested that the name osteopetrosis (stony bones) be applied to this entity.

In 1933 Pirie[4] reported four cases. His findings were that the bones of patients with this disease were softer than normal and that they drilled and cut more like chalk than like marble or stone. He, therefore, suggested the name "chalky bones." Most others have not found this softness of the bones which Pirie described, and it is the consensus that, while these bones are stony hard on drilling or sawing, they are brittle, and that it is this brittleness which is responsible for the relative frequency of fractures in patients with this affliction. The discrepancy as to the hardness of the bone may not be as great as it would at first appear, since Brailsford[5] states, "The affected bones may vary in hardness according to the age of the patient with the bones getting harder if the patient survives to adult life." Also Kneal and Sante[1] think that the hardness of the bone may be dependent upon the age of the patient, the duration of the disease, and the site from which it is taken.

CLINICAL ASPECTS

The disease is found in both sexes with no significant predominance and in all races and at all ages. About one-fourth of the cases are reported in consanguineous marriages (the marriage of cousins). According to the study of Hinkel and Beiler[6] 40 per cent of all cases and 50 per cent of adult cases are familial. They also state that their review of the literature up to 1955 reveals that the disease is rarely seen in successive generations. However, McPeak[7] in 1936 reported eight cases occurring in three generations of one family, and our cases are also in three generations of one family.

The disease is arbitrarily divided into two types, one of which is called "malignant" and the other "benign." However, it must be emphasized that from a purely roentgen point of view there is no clear-cut distinction between the types. All degrees of severity are seen.

THE MALIGNANT TYPE

The malignant type of the disease is generally thought to be sporadic and seldom familial. The patients with this type usually die early in life and, of course, do not live to reach the reproductive age. In these cases the skull, especially in the region of its base, is severely involved. This produces narrowing of the foramina through which the cranial nerves emerge and through which venous drainage occurs. This, in turn, produces cranial nerve palsies and hydrocephalus.

Case 1 (figure 1). A 60-year-old white woman is the grandmother of the first member of this family in whom we noted the disease (first generation). She does not give a history of frequent fractures or anemia. Films taken at another hospital in January, 1961, following a fall, revealed no evidence of recent fracture of the ribs. However, they did reveal evidence of an old healed rib fracture and the typical changes of osteopetrosis involving the vertebral bodies, the scapula, and the proximal humerus. No information regarding the patient's blood picture is presently available.

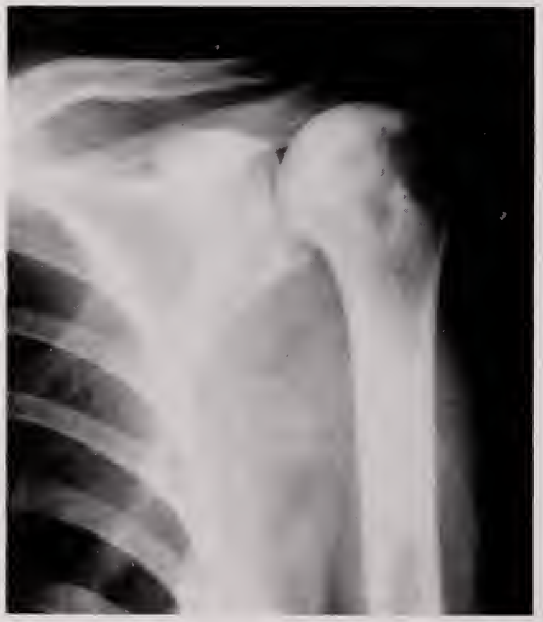


FIG. 1. Areas of increased density are evident in the proximal humerus and scapula with loss of differentiation between cortex and spongiosa.

Case 2 (figure 2). A 38-year-old white woman is the mother of our first patient (case 4) (second generation). She stated that she never sustained a fracture and has had no other complaints referable to the osseous system. Her films reveal typical changes, with the pelvis showing the "bone within a bone" appearance. The hematocrit was 42. Two of her children (the oldest and the youngest) show evidence of osteopetrosis as noted below.

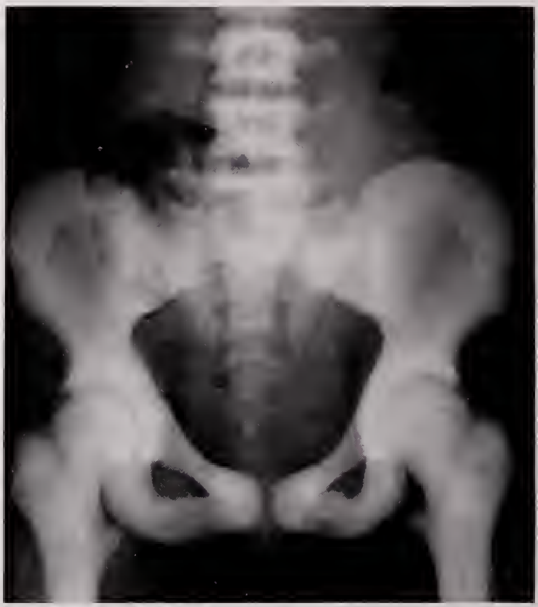


FIG. 2. Characteristic "bone within a bone" appearance.

Malignant osteopetrosis is also characterized by the development of severe and progressive anemia. Depression of the formation of white blood cells and platelets also occurs so that repeated upper respiratory infections and bleeding phenomena result. Such a case was reported by Cohen,[8] in which his patient, who was observed for 20 months beginning when he was one year of age, died of epistaxis. At autopsy the liver, spleen and lymph nodes were enlarged due to the fact that they were aiding hematopoiesis. Areas of hematopoiesis were also found in the heart, lungs, pancreas and kidneys. The bones were hard but brittle and showed no tendency to the greenstick type of fractures which is usual in patients of this age. Characteristic changes were found in the skull. The ribs were greatly broadened, and the long bones were broadened and clubbed with both showing deficient tubulation.

THE BENIGN TYPE

The benign type may be completely asymptomatic or may reveal itself by abnormal fractures as in our first case. This type is strongly familial. Hinkel and Beiler[6] think that the probability is that the osteopetrotic gene is relatively low in dominance (recessive) but may be dominant if paired with a gene still lower in the scale.

Fairbank[9] thinks, as do some others, that the benign type may actually begin later in life. This would seem to be borne out by one of the cases reported by Montgomery and Standard.[10] In this case the spongiosa had an apparently normal pattern until the patient reached 11 years of age. They further pointed out the tendency of the disease to reproduce itself in the same pattern in a given family. They reported nine cases in a single family in which the mother and father were second cousins and in which the mother and the youngest of the nine children, who was one year of age, showed no evidence of the disease. Three of the children in this family developed facial palsy at the age of six years. None of the patients showed the usual "sandwich vertebrae." They think that the findings of previous writers are a "composite picture" and that many variations are found within the "spectrum" of osteopetrosis.

Case 3 (figures 3 and 4). A 17-year-old white boy is the brother of our first patient (third generation). He has never sustained a fracture. However, he began to complain of pain in the region of the right hip at the age of 11. The leg began to "turn in" when he became fatigued. X-ray films showed the hip to be normal, but a diagnosis of osteopetrosis was made. He was the first member of this family on whom the diagnosis was made. Discomfort in his right hip increased, and further study at age 15 revealed "flattening of the capital epiphysis of the right femur with rarefaction and demineralization." The boy was operated on, and a diagnosis of pigmented villonodular synovitis was made. At the time of operation the red blood cells numbered 2,780,000 and the hemoglobin 10.4 Gm.

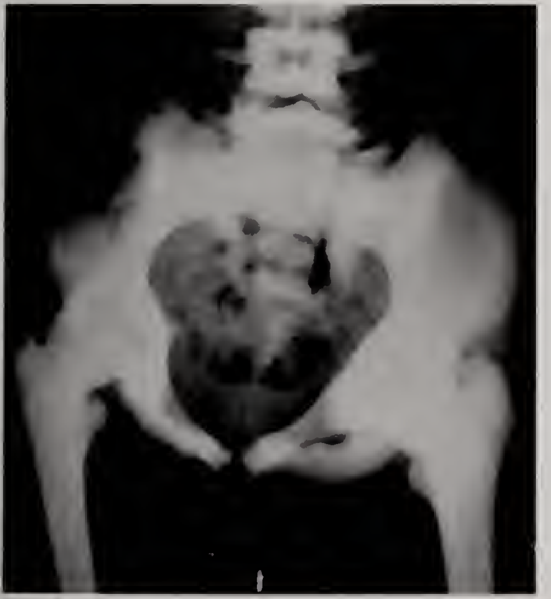


FIG. 3. In addition to increased density of bones of pelvis and upper femora, there is flattening of head of right femoral capital epiphysis. This change has not been stressed as being a finding in osteopetrosis and may be fortuitous.

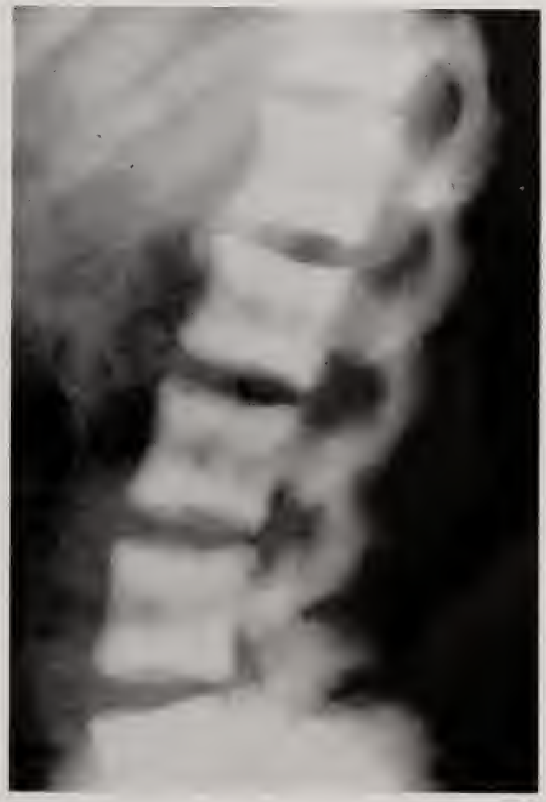


FIG. 4. Greatly increased density of end plates of vertebral bodies, producing typical "sandwich vertebrae."

Also in keeping with this concept are the cases reported by Truswell,[11] in which syndactyly was a constant finding. Another group of cases which supports this theory is that reported by Seigman and Kilby[12] in which each patient showed hypoplasia of the fingers and toes as well as a spongy type of bone formation in the parietal bones.

ROENTGEN ASPECTS

Although the roentgen characteristics of the "standard" case of benign osteopetrosis have been very adequately described by previous writers, we feel it worthwhile to summarize them here for the sake of completion.

It is important to keep in mind that changes due to osteopetrosis are always symmetrical no matter what the severity of the disease.

Long bones (figures 1 and 5). In the mildest cases or in early cases these may consist of only dense transverse bands at the metaphyses and involve especially the proximal end of the humerus and both ends of the femur. The changes range all the way to the cases in which clubbing of the ends of the long bones is so severe that even the tuberosities and the trochanters are nearly obscured. These changes extend from the metaphysis far into the diaphysis, reducing greatly the size of the marrow cavity. It is the belief of some authors that the size of the nutrient canals is also decreased with resulting diminished blood supply to the bone. This is especially stressed in the case of Kneal and Sante,[1] who think that "Such a state of the bony structure may result in spontaneous infractions wherever the bone is at a strain." Their patient showed such spontaneous infraction of the femoral necks. Multiple transverse lines of uneven density are noted in the region of the epiphyses. These have been interpreted by some writers (Cohen[8]) as representing healed fissure fractures.

Carpal and tarsal bones (figure 7). The mildest change in these bones is a dense nidus not unlike a bone island. In more severe cases this density takes on the outline of the bone within which it lies and has the appearance of a

Case 4 (figures 5, 6 and 7). A 13-year-old white girl was our first patient in this family (third generation). She was first examined in October, 1958 following a fall while at play. Fractures of all of the fingers of the left hand except the thumb occurred. The carpal bones revealed the "bone within a bone" appearance, and the shafts of the long bones revealed cortical thickening. These healed with no delay. The patient was again seen in November, 1959, at which time she sustained a fine transverse fracture of the proximal shaft of the right fibula. In April of 1960 she had a fracture of the proximal phalanx of the fifth left finger. In May, 1961 she fractured the middle phalanx. This patient has shown a greater tendency to sustain fractures than have any of the other members of this family.

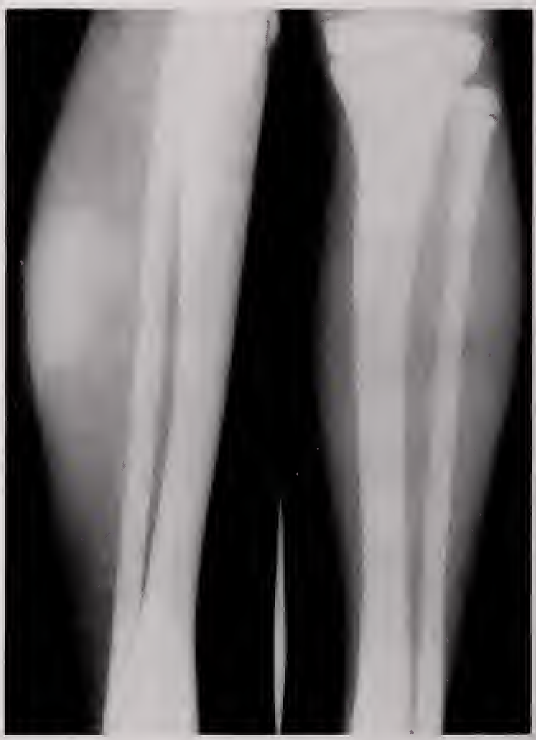


FIG. 5. Increased density of tibia and fibula with mild clubbing of proximal ends of bones. In addition, there is a fine fracture line extending transversely through the proximal fibular diaphysis.

In November, 1961 X-ray films of the hip were made because of intermittent pain, more severe in the left hip. This pain had been noted intermittently for more than a year. Although the hip joints are thought to be normal at this time, the possibility that the patient may be developing lesions similar to those seen in her brother cannot be excluded. Her pelvis shows the "bone within a bone" appearance. The hematocrit was 35.5 in November, 1961.

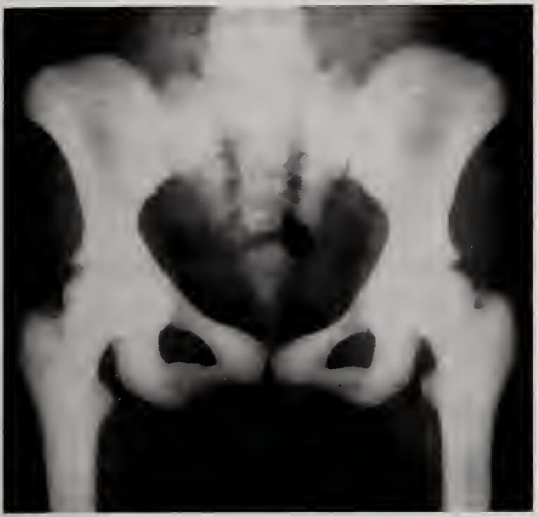


FIG. 6. Characteristic "bone within a bone" appearance.

"bone within a bone." Such findings are most frequent in the talus, os calcis, and tarsal navicular.

Pelvis (figure 2). This deserves special mention in that it is the one bone which is most frequently involved. It presents the "bone within a bone" appearance.

Spine (figure 4). Here changes are usually seen and are quite striking due to the increased density of the end-plates of the vertebral bodies. This produces the typical "sandwich vertebrae."

Shoulder girdle (figure 1). The increased density is most frequently seen in the region of the head, neck and coracoid process of the scapula.

Skull. In mild cases the changes may be confined to thickening of the posterior and, to a lesser extent, the anterior clinoids. In cases showing greater involvement the base of the skull may be sclerotic with narrowing of the foramina and varying degrees of obliteration of the mastoids, sphenoids, ethmoids and frontals. Less often it may involve the entire skull with thickening of the vault and obliteration of the diploë.

Facial bones. Some families have shown a great tendency toward facial bone involvement while others have shown none. Higenbotham and Alexander[13] stressed the severe involvement of the mandible in some cases and emphasized the possibility of osteomyelitis of the mandible in some.

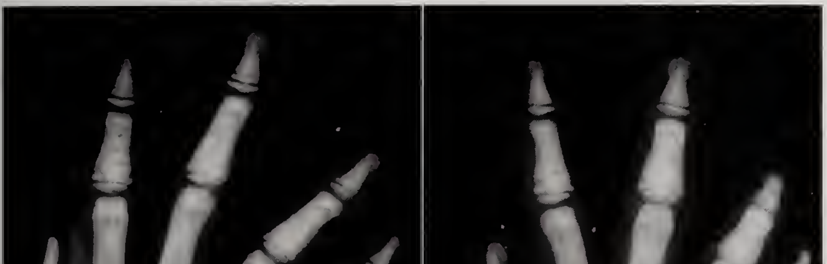


FIG. 7. Multiple fractures of phalanges of left hand; cortical thickening of phalanges and metacarpals. The carpal bones demonstrate the "bone within a bone" appearance.

Hands and feet (figure 7). Here, again, varying degrees of involvement are seen. When these bones show any appreciable degree of involvement the possibility of fracture is likely. This occurred in our first patient with osteopetrosis.

CHEMISTRY

Blood chemistry is not remarkable in most of the cases in which it has been reported. However, there was elevation of the serum alkaline phosphatase in seven of the nine patients reported by Montgomery and Standard.[10] They think that this was most likely a retarded exhibition of the normal phosphatase activity of infancy.

Case 5 (figure 8). A-31-year-old white woman is an aunt of our first patient and shows evidence of the disease (second generation). This was diagnosed for the first time in 1958. She sustained her only fracture (of the radius) in 1961 as the result of a direct blow on the forearm. It healed without complication. She has no anemia. All four of her children show evidence of osteopetrosis (cases 6, 7, 8 and 9).

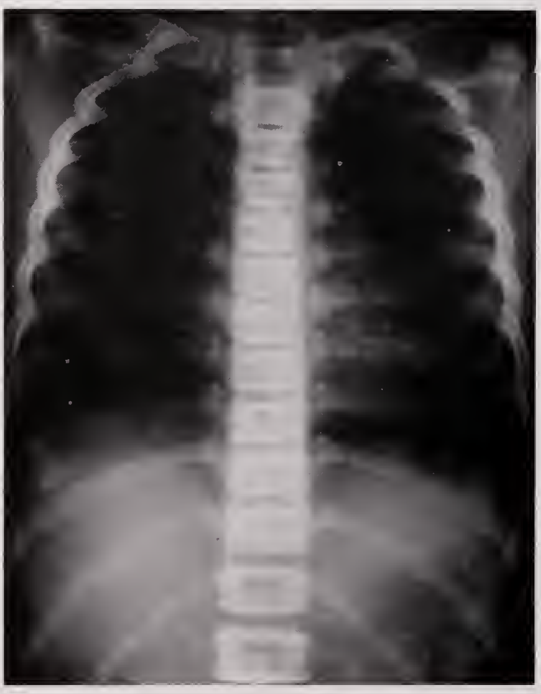


FIG. 8. Thickening of end plates of dorsal vertebral bodies, producing the "sandwich vertebrae."

Case 6 (figure 9). A 12-year-old white boy is the son of patient no. 5 and the first cousin of our first patient, as are patients 7, 8 and 9 (third generation). His osteopetrosis was diagnosed by us in 1958. He has had no fractures. He is not anemic.

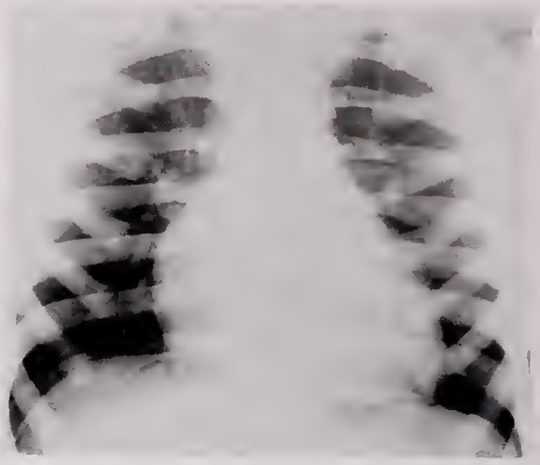


FIG. 9. Increased density of ribs.

Case 7. An 11-year-old white girl is a daughter of patient no. 5 (third generation). Her osteopetrosis was diagnosed by us in 1958. She has had no fractures and no anemia.

Case 8. A 9-year-old white boy is a son of patient no. 5 (third generation). His osteopetrosis was diagnosed by us in 1958. He has had no fractures and no anemia.

Case 9. An 8-year-old white girl is a daughter of patient no. 5 (third generation). Her osteopetrosis was diagnosed by us in 1958. She has had no fractures and no anemia.

As for analysis of the actual bone, Kramer, Yusko and Steiner[14] found that the percentage of calcium and phosphorus in the bones of an infant with osteopetrosis was distinctly elevated.

ETIOLOGY AND PATHOLOGY

There has not been complete accord as to the exact nature of the underlying changes which produce this condition. While some authors have thought that the bone changes were due to abnormal calcification of cartilage, the explanation which would best account for the changes in both the long bones and the membranous bones is the one first proposed by Bradley and McCune[15] in 1934, in which they expressed the thought that the basic defect is due to faulty differentiation of mesenchyme, which is responsible for the formation of both bone and blood. In 1947 Zawisch[16] made an extensive histologic study of cross sections of the femur and longitudinal sections of a rib obtained from an infant who died of the disease at the age of 13 months. Zawisch's conclusions were that the underlying cause of the disease was a defect in the primitive mesenchyme at the beginning of the second period of bone formation. This occurs at the end of the fourteenth week of intrauterine life. An unknown agent is thought to damage the bone-forming blastema at the beginning of the second period of development of each individual bone. From this point on the differentiation of bone tissue is retarded and the less differentiated types become hyperplastic. The threshold of response to the stimuli which bring about resorption is somehow felt to be raised. Zawisch thinks that what has been called cartilage in these bones is actually plexiform bone of a fetal type which remains present because it has failed to undergo resorption. She feels that resorption is a function of vascular tissue and remains potentially active until blocked by the appearance of abnormal second period mesenchyme. While resorption does not occur normally, it is thought that there are periodic recurrences of widespread resorption and that during these periods the bones are more brittle than usual. The clubbing of the long bones may be accounted for by the more rapid growth in the ends of the long bones. When there is a differential in growth rate of the two ends of a long bone, as in the ends of the femur and humerus, the more rapidly growing end shows the greater degree of clubbing. These periodic outbursts probably offer an explanation of the occasional alterations in blood chemistry of calcium and phosphorus.

These changes may also explain why the patient of Kneal and Sante had no difficulty healing the fracture of the femoral shaft during infancy, but the same patient had delayed healing of a fracture of the femoral shaft at only a slightly higher level when eight years of age.

Zawisch thinks that it is these periodic outbursts which produce the transverse lines of alternating density seen near the ends of the long bones.

The anemia appears to be directly proportional to the severity of the disease and is thought to be due to lack of marrow cavity producing myelophthisic anemia. The production of marrow has been shown to be dependent upon the resorption of bone. The lack of resorption not only retards further differentiation of bone but also impairs hematopoiesis (hematocytosis).

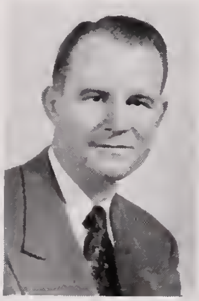
N.B. We should like to thank Drs. J. E. Malia and J. D. Hayes, Pittsburgh, Pa.; Dr. M. S. Stevenson, Finleyville, Pa.; Dr. T. L. Wilfong, Library, Pa.; and Dr. Louis A. Vogel, Euclid, Ohio, for making available some of the radiographs and clinical data on these patients. We should also like to thank Mrs. Mabel Grant, Monongahela, Pa., for her help in assembling and recording data on these patients.

REFERENCES

1. Kneal, E., and Sante, L. R.: Amer. J. Dis. Child., 1951, **81**, 693.
2. Albers-Schönberg: Auz Verin Hamburg, G., 1904, vol. 11; Fortschr. Roentgenstr., 1915–16, vol. 11.
3. Karshner, R. G.: Amer. J. Roentgenol., 1926, **16**, 405.
4. Pirie, A. H.: Ibid., 1933, **30**, 618.
5. Brailsford, J. F.: The Radiology of Bone and Joints, 5th ed. London: Churchill, 1953.
6. Hinkel, C. L., and Beiler, D. D.: Amer. J. Roentgenol., 1955, **74**, 46.
7. McPeak, C. N.: Ibid., 1936, **36**, 816.
8. Cohen, J.: J. Bone Joint Surg., 1951, **33A**, 923.
9. Fairbank, H. A. T.: Ibid., 1948, **30B**, 339.
10. Montgomery, R. D., and Standard, K. L.: Ibid., 1960, **42B**, 303.
11. Truswell, A. S.: Ibid., 1958, **40B**, 208.
12. Seigman, E. L., and Kilby, W. L.: Amer. J. Roentgenol., 1950. **63**, 865.
13. Higinbotham, N. L., and Alexander, S. F.: Amer. J. Surg., 1941. **53**, 444.
14. Kramer, B., Yusko, H., and Steiner, M.: Amer. J. Dis. Child., 1939, **57**, 1044.
15. McCune, D. J., and Bradley, C.: Ibid., 1934, **48**, 949.
16. Zawisch, C.: AMA Arch. Path., 1947, **43**, 55.

PRESIDENT'S PAGE

THE TRUTH, THE WHOLE TRUTH, AND NOTHING BUT THE TRUTH!



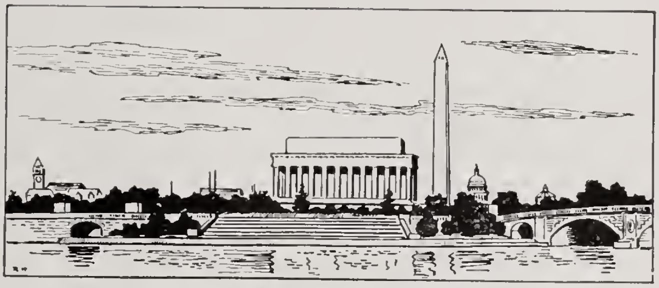
Most of us from time to time are brought face to face with the unpleasant question of whether or not, under all circumstances, it is to the best interest of our patient to tell him, or her, the whole truth regarding his condition. This matter has been a subject for discussion for centuries and some of our most learned and respected colleagues have expressed divergent points of view.

I do not propose to have the answer to this problem; however, my interest was recently stimulated when I was asked this question during an open discussion in the Men's Bible Class of my Sunday School. Needless to say, a straight "yes" or "no" reply without exceptions would be inadequate. There are, no doubt, occasions when in the considered and conscientious opinion of the physician, together with the full knowledge and concurrence of the responsible members of the family, the best interests of the patient are served by not divulging all the details regarding his condition.

Some may say that this is not telling the whole truth. With this there can be no argument, but one must not forget that medicine is not an exact science and that there is always the remote possibility that what we considered to be a fact could eventually turn out to be only a supposition.

It is my belief that the physician should never tell his patient a falsehood. He may be justified, under extenuating circumstances, in withholding some of the information if, in so doing, he renders harm to no one and good to someone other than himself.

J Spencer Dryden



EDITORIALS

The New Medical Curriculum of The George Washington University

After five years of intensive study the faculty of the George Washington University School of Medicine has approved the outline of a new curriculum and has taken the first steps toward putting it into effect. Changeover to the new teaching plan will be made gradually over a period of several years, but significant steps will be taken this fall.

The primary objectives of the new program, as stated in resolutions adopted by the faculty, are as follows:

1. To increase the number of qualified physicians graduating from the School of Medicine;
2. To inculcate in the student a concept of the personal nature of medical care;
3. To help each medical student find the area of medicine for which he is best suited;
4. To improve the medical curriculum as an instrument for the training of physicians; and
5. To give students of limited financial means the opportunity to study medicine.

The "Continuing Care Program" is the most important new feature to be added in 1962–63. Shortly after the beginning of the fall term each third-year medical student will be assigned three patients, and the student will participate in the care of these three patients for the next 18 months. One patient will be a young woman in the first or second trimester of pregnancy. The student will attend her at regular intervals throughout the prenatal period, will be present at her delivery, and will follow her course postpartum. He will observe the new baby's growth and development for about a year, during which time he will also take part in the medical care of the baby's mother and father, and of any other children in the family. The student's other two patients will each have a chronic disease, perhaps heart disease, diabetes, high blood pressure, or cancer.

In order to acquaint the student with certain aspects of neighborhood medical care, the continuity care service will be decentralized. The Washington Hospital Center and Fairfax Hospital will join with the George Washington University Hospital in providing patients for this program. Practicing physicians from the staffs of these three teaching hospitals will direct the care of all patients assigned under the program and will guide the students in their study of community health resources. These physicians will be especially selected because of their interest in long-term medical care. Patients in the program will look to a single physician and a single student for guidance in all matters of health; consultations with specialists will, of course, be obtained whenever necessary. Patients will be seen under circumstances simulating the private practice of medicine, in the office, home and hospital as required. Each student will become

Opinions expressed in the contributions to the Editorial Section are those of the writer and do not necessarily reflect the views of the Medical Society of the District of Columbia thoroughly familiar with each patient's home environment and will study the impact of environment on illness and recovery. Careful records will be maintained throughout the entire period, and will be reviewed at regular intervals by the attending physicians. Each student will be graded on the basis of his effectiveness with his patients; judgment and acceptance of responsibility will be especially considered.

The year 1962–63 will also give each student opportunity to develop along lines of his own individual interest. Each senior will spend six weeks on electives, and following classes will have even greater freedom for this type of study. When the new curriculum becomes fully effective, elective courses will be offered in each term except the first, and in the aggregate will account for about one-fifth of total clock hours required for graduation. The medical resources of the Washington area seem particularly suited for the development of electives, especially in the basic medical sciences and in research, but also in clinical fields.

As the electives program is expanded, a system of career guidance for medical students will be put into effect. A study will be made to determine those qualities of mind, spirit and personality which are best suited to the different fields of medicine, and students will be encouraged to try electives in those fields for which they seem to be best suited. The student's performance in the electives program will serve to confirm or modify the judgment of the counselor.

When staff and physical plant permit the University faculty plans to increase its output of physicians and thereby help meet the critical national need. Rather than increase the number of students in each class, however, G.W. proposes to increase the number of classes. Thus, when a new building is available, two classes will be accepted each year, and instruction will be offered year-round.

When this is done the student will be offered the option of proceeding at a normal schedule, with summer vacations as at present, or of accelerating or decelerating his course to meet his individual needs or desires (within certain limits). A student of limited financial means may find it to his advantage to go to school half-time but continuously, foregoing vacations, thereby completing the work of the first two years in three years' time and dropping back to the class behind the one in which he entered. Students with an inclination toward research will find it possible in the new multiphasic schedule to drop out of school for a single term to pursue a research project without having to wait a full year to join the following class. Students of exceptional ability and older students may choose continuous full-time enrollment, thus graduating from medical school 36 months after completing their premedical course instead of after 48 months as in the conventional schedule. (This flexibility of schedule is a secondary benefit of the double classes; this feature cannot be developed until the new building for the School of Medicine is completed.)

When two classes are enrolled each year the clerkship plan will be changed from the conventional rotating clerkship in which some students start on medicine, some on surgery, etc. to a graded clerkship with progressively increasing significance for the student. In this plan each group of students will start their clerkship in psychiatry, learning the art of interview and interpretation, will go next to medicine to learn diagnostic and therapeutic principles, will move subsequently to surgery and related specialties for the development of skills and techniques, and will finally complete their clerkship in the outpatient clinics where increased responsibility will be given.

The full changeover to the new program of medical education will require expansion of the physical plant and enlargement of the faculty. A grant of $400,000 from the Commonwealth Fund, to be expended over the next three years, will make possible the initial changes.

Meanwhile, a one-year grant of $48,600 from the Educational Facilities Laboratories, Incorporated, will provide resources for a study project to determine future needs. The project director, working full-time with a project architect, will translate the various features of the new curriculum into needs for classrooms, laboratories, and clinical facilities. From this will come clearer concepts of the size, location, and contour of needed buildings and of their cost. Funds will then be sought from various sources to erect the new buildings on land the University has acquired for this purpose adjacent to the buildings of the University Hospital and Cancer Clinic.

The George Washington University School of Medicine has a long history of distinguished service to the community and to the Nation. The current stir in the faculty foretells a vigorous and promising future.

T. M. P.

Dr. Annis and AMA

By now, the selection of Dr. Edward Annis of Miami as President-elect of the AMA is known to all physicians. Many columns have been used in commenting on this "break in precedent," selecting from the rank-in-file rather than the ranks. It is evident from articles in various medical journals and bulletins that this twist in the delegates' voting pattern means different things to different people.

Dr. Annis has captured the eye of medicine and the public. He has deported himself admirably and has earned a chance at the top spot. Major problems sometimes require major changes in approach. This may be the case here.

In a way, in this new approach—a President-elect from the rank-in-file, a new American Medical Political Action Committee, and an expanded Field Service—we have reminders of the new approach taken during the Wagner-Murray-Dingell bill era. Then it was the establishment of a Washington Office, the National Physicians Committee, and finally the employment of "Whittaker and Baxter." The cause and cure of problems which require such drastic actions continue to evade the profession.

Are rising costs the cause, and is prepayment or insurance the answer? Or, is this primarily a political issue?

In any event, Dr. Annis has even better ingredients for positive leadership than did those who braved the proponents of the Wagner-Murray-Dingell bills. He has a real team behind him, with their names and abilities known. It remains for the manager and coaches to call the plays.

G. W. C.

Volunteers for the Polio Immunization Report

The Medical Society has joined with the Health Department and other civic groups in the District in sponsoring a mass immunization program against poliomyelitis. The live Sabin virus vaccine will be used in three doses: Type I on Sunday, October 7; Type III on Sunday, November 18; and Type II on Sunday, January 13, 1963.

The success of this project will depend upon the support of individual physicians as well as volunteers from pharmaceutical, nursing, and lay groups. Eighty physician volunteers will be needed each Sunday to provide guidance and to answer medical questions at the 20 centers. A letter has been sent to each member asking for an indication as to the time and date he is willing to serve.

Other medical societies throughout the country have given their full coöperation to such projects. Let's not let it be said that the Medical Society of the District of Columbia was less civic-minded. So, if you have not done so, please fill out your form and return it immediately.

Hospital Costs Continue to Rise

In recent years the annual increase in costs per patient-day in non-Federal short-term general hospitals has ranged between 6 and 9.5 per cent. For 1961 the per diem cost was $34.98, or an increase of $2.75 over the $32.23 figure of 1960—an 8.5 per cent increase. According to Edwin L. Crosley, M.D., Director of the A.H.A., "Most of the increase results from rising labor costs, as salaries rise generally and as more skilled employees are needed to provide today's highly specialized care." "Other functions," he said, "are increasing research, education of health personnel, and rising equipment costs."

From Other Journals

√ A RECENT medical society bulletin carried a President's Page in which it was stated, "The only valid reason for our existence as a Society is to serve the needs of physician members."

This seemed a bit startling in view of the many, many public services rendered by the members of the Medical Society of the District of Columbia. Certainly, the work of most of the committees is devoted, in part or in full, to seeking ways in which individual physicians and the Society as a whole can best serve the health of the people of the District. Perhaps what was meant is that to serve others is to serve yourself.

* * *

√ AN EDITORIAL commenting on "Just Where Are We Drifting," as such drift is guided by more and more Federal intervention, ends with the following:

"It is probably too late to regain what we have already lost, but it is not too late to insist that our medical organizations give as much time to our socioeconomic troubles as we do to scientific affairs. It will only be done when every doctor attends his medical meeting and makes his presence felt."

Actually medical societies (as distinct from specialty societies) do give much time to socioeconomic problems. They are prepared to give more, but physicians evince little interest until the problem reaches them personally.

* * *

√ ALONG THIS SAME LINE, it is interesting to note that the Department of Health, Education, and Welfare has granted Harvard University $300,000 for a five-year study of economic and administrative problems of medical care. Evidently the study will be made by the Harvard School of Public Health.

It shouldn't take too much imagination to guess the results. Many studies now exist and volumes have been written on the subject. The truth seems to be that national studies in this field have little practical value, and any study reflects the philosophy or political leanings of those involved.

Second
INTERSTATE SCIENTIFIC ASSEMBLY

ATON-PARK HOTEL

WASHINGTON, D. C., OCT. 15-16-17, 1962

THE MEDICAL SOCIETY OF THE DISTRICT OF COLUMBIA

THE MEDICAL SOCIETY OF VIRGINIA

PROGRESS

Eight years ago the first joint Scientific Assembly of the Medical Society of D. C. and Medical Society of Virginia was held in Washington, D. C. That we are now cosponsoring a Second Assembly is progress. A bit slow perhaps, but progress nevertheless.

As close as we are together in time and even in miles, it is surprising how infrequently we exchange views on medical problems or share the pleasures of social affairs. This Assembly is a real opportunity for such exchange and sharing and I urge every member to take full advantage of it.

The Committee on Arrangements has prepared a full schedule of scientific sessions, medical motion pictures, scientific and technical exhibits, and social events. To our Virginia colleagues I extend a warm welcome, and to our own members an urgent reminder not to miss the Assembly.

J Spencer Dryden

SECOND INTERSTATE SCIENTIFIC ASSEMBLY

C. Willard Camalier, Jr., M.D.
General Chairman
Washington, D. C.

Bernard J. Walsh, M.D.
Chairman, Program Committee
Washington, D.C.

James M. Moss, M.D.
Co-Chairman
Alexandria, Virginia

Owen Gwathmey, M.D.
Co-Chairman, Program Committee
Richmond, Virginia

SCIENTIFIC PROGRAM*

All Sessions at the Sheraton-Park Hotel

MONDAY, OCTOBER 15—MORNING SESSION

SHERATON HALL

Presiding:

J. Spencer Dryden, M.D.
President, The Medical Society of the District of Columbia

Russell Buxton, M.D.
President, The Medical Society of Virginia

9:00–9:15 WELCOME BY DRS. DRYDEN AND BUXTON

9:15–10:40 SPACE MEDICINE TECHNIQUES: SOME APPLICATIONS TO CLINICAL PRACTICE
PRESIDING:
James M. Moss, M.D.
Co-Chairman of Joint Assembly

9:15–9:40 SPACE MEDICINE IN SUPPORT OF MANNED SPACE FLIGHT
Brig. General Charles H. Roadman, USAF, MC
Director, Aerospace Medicine, Office of Manned Space Flight, National Aeronautics and Space Administration

9:40–10:05 AEROMEDICAL EVALUATIONS OF AEROSPACE CREWS
Lawrence E. Lamb, M.D.
Professor of Internal Medicine and Chief, Clinical Sciences Division, School of Air and Space Medicine, Brooks Air Force Base, Texas

10:05–10:30 COMPUTER EVALUATION OF BIOMEDICAL DATA
Donald D. Wall, Ph.D.
Special Technical Representative, Federal Systems Division, International Business Machines, Washington, D. C.

10:30–11:10 INTERMISSION TO VISIT EXHIBITS

11:10–12:30 OBSTRUCTIVE UROPATHY
PRESIDING:
George E. Schreiner, M.D.
Professor of Medicine, Georgetown University School of Medicine

11:15–11:25 MEDICAL ASPECTS OF BLADDER NECK OBSTRUCTION
John F. Maher, M.D.
Instructor in Medicine, Georgetown University School of Medicine

11:25–11:35 PEDIATRIC ASPECTS OF BLADDER NECK OBSTRUCTION
Philip L. Calcagno, M.D.
Professor and Chairman of the Department of Pediatrics, Georgetown University School of Medicine

11:35–11:55 SURGICAL ASPECTS OF BLADDER NECK OBSTRUCTION
Roger Baker, M.D.
Professor and Director of the Department of Urology, Georgetown University School of Medicine

---

* See official program for any changes in this schedule.

11:55–12:30 Panel Discussion:

George E. Schreiner, M.D.
John F. Maher, M.D.
Philip L. Calcagno, M.D.
Roger Baker, M.D.

William C. Maxsted, M.D.
Instructor in Urology, Georgetown University School of Medicine

12:30–2:00 Recess for Lunch and Visit Exhibits

MONDAY, OCTOBER 15—AFTERNOON SESSION

SHERATON HALL

Presiding:
C. Willard Camalier, Jr., M.D.
General Chairman, Joint Assembly

2:00–2:15 Nitrous Oxide Gasogram for Difficult Diagnosis for Pelvic Pathology
Christopher J. Murphy, M.D.
Alexandria, Va.

2:15–2:45 Antibiotic Therapy in Lung Abscess and Bronchiectasis
Thomas Barnett, M.D.
Professor of Medicine, University of North Carolina

2:45–3:00 The Diagnosis of Vascular, Neurovascular and Neuropathy Diseases of the Upper Extremities
Eugene L. Lowenberg, M.D.
Norfolk, Va.

3:00–3:30 Recess to Visit Exhibits

3:30–3:45 The Electromyogram (EMG) as an Aid in the Diagnosis of Neuromuscular Diseases
Cary G. Suter, M.D.
Associate Professor of Neurology, Medical College of Virginia, Richmond

3:45–4:00 Colorectal Polyps in Children
Arnold M. Salzberg, M.D.
Assistant Professor of Surgery, Medical College of Virginia, Richmond

CONTINENTAL ROOM

2:30–5:00 Continuing Graduate Medical Education in the Community Hospital
Presiding:
Richard E. Palmer, M.D.
Assistant Clinical Professor of Pathology, George Washington University School of Medicine; Pathologist, Alexandria and Circle Terrace Hospitals, Alexandria, Va.

2:30–2:40 The Role of the Council on Medical Education and Hospitals
John C. Nunemaker, M.D.
Council on Medical Education and Hospitals, American Medical Association, Chicago, Ill.

2:40–2:50 The Role of the Medical Staff of a Community Hospital in Graduate Medical Education
Harrison Picot, M.D.
Chairman, Committee to Study Trends in Medical Practice, Alexandria Medical Society, Alexandria, Va.

2:50–3:00 The Role of a Medical School in Graduate Medical Education in a Community Hospital
Clayton B. Ethridge, M.D.
Professor of Medicine and Director of Postgraduate Medical Education, George Washington University School of Medicine

3:00–3:10 The Role of a University Hospital in Graduate Medical Education in a Community Hospital
Bruce I. Shnider, M.D.
Assistant Dean, Georgetown University School of Medicine

SHERATON HALL

4:00–4:15 SURGICAL TREATMENT OF DEAFNESS

Irvin Hantman, M.D.
Associate Professor of Otolaryngology, Georgetown University School of Medicine

4:15–4:30 SURGICAL TREATMENT OF CANCER OF THE NOSE

Claude C. Coleman, Jr., M.D.
Associate Professor of Surgery (Plastic Surgery), University of Virginia, Charlottesville

CONTINENTAL ROOM

3:10–3:20 THE ROLE OF A DIRECTOR OF MEDICAL EDUCATION IN GRADUATE MEDICAL EDUCATION IN A COMMUNITY HOSPITAL

Donald W. Drew, M.D.
Director of Medical Education and Consultant to the Cardiac Clinic, Norfolk General Hospital, Norfolk, Va.

3:20–3:40 INTERMISSION TO VISIT EXHIBITS

3:40 DISCUSSION

TUESDAY, OCTOBER 16—MORNING SESSION

SHERATON HALL

9:00–12:30 GENETIC BASIS OF PEDIATRIC DISEASE

PRESIDING:
J. A. White, M.D.
Vice President, The Medical Society of Virginia

MODERATOR:
Malcolm M. Martin, M.D.
Assistant Professor of Pediatrics, Georgetown University School of Medicine

9:00–9:30 RECENT ADVANCES IN BASIC GENETICS

Malcolm M. Martin, M.D.
Assistant Professor of Pediatrics, Georgetown University School of Medicine

9:30–10:00 GENETICS IN PEDIATRIC PRACTICE

Barton Childs, M.D.
Associate Professor of Pediatrics, Johns Hopkins University School of Medicine

10:00–10:30 GENETICS, MUTATION AND RADIATION

William Long, Ph.D.
Assistant Professor of Anatomy, Johns Hopkins University School of Medicine

10:30–11:00 INTERMISSION TO VISIT EXHIBITS

CONTINENTAL ROOM

9:00–10:30 PANEL DISCUSSION ON TOXIC GOITER: ATTITUDES ON DIAGNOSIS AND MANAGEMENT

MODERATOR:
Ernest A. Gould, M.D.
Senior Attending Surgeon, Washington Hospital Center

PANELISTS:
Kenneth R. Crispell, M.D.
Associate Professor of Medicine and Assistant Dean, University of Virginia, Charlottesville
Jacob Robbins, M.D.
Senior Investigator in Clinical Endocrinology Branch, National Institute of Arthritis and Metabolic Diseases, National Institutes of Health

10:30–11:00 INTERMISSION TO VISIT EXHIBITS

11:00–12:30 PANEL DISCUSSION ON CURRENT CONSIDERATIONS OF DIVERTICULOSIS AND DIVERTICULITIS

MODERATOR:
Maurice Mensh, M.D.
Associate Professor of Medicine, George Washington University School of Medicine

PANELISTS:
Kenneth W. Warren, M.D.
Surgeon, Lahey Clinic, Boston

Sheraton Hall

11:00–12:30 Symposium:

Malcolm M. Martin, M.D.
Barton Childs, M.D.
William Long, Ph.D.

12:30–2:15 Recess for Lunch and Visit Exhibits

Continental Room

Charles M. Caravati, M.D.
Professor of Clinical Medicine, Medical College of Virginia, Richmond

Charles E. Bickham, Jr., M.D.
Groover, Christie & Merritt, Washington, D. C.

12:30–2:15 Recess for Lunch and Visit Exhibits

TUESDAY, OCTOBER 16—AFTERNOON SESSION

SHERATON HALL

2:15–4:30 Tumor Board

Moderator:

Philip H. Philbin, M.D.
Senior Attending Surgeon, Washington Hospital Center; Clinical Instructor in Surgery, Georgetown University School of Medicine

Panelists:

Theodore Winship, M.D.
Pathologist, Washington Hospital Center

Kenneth W. Warren, M.D.
Surgeon, Lahey Clinic, Boston

Colonel Albert J. Bauer, USA, MC
Radiologist, Walter Reed Army Medical Center

Emil Frei III, M.D.
Chief, Medicine Branch, National Cancer Institute, National Institutes of Health

CONTINENTAL ROOM

2:15–3:15 Autoimmune Disease

Presiding:

Frank S. Pellegrini, M.D.
First Vice President, The Medical Society of the District of Columbia

Moderator:

R. E. Ritts, Jr., M.D.
Professor and Chairman, Department of Microbiology, Georgetown University School of Medicine

2:30–2:45 Autoimmune Hematological Disorders

Colonel William H. Crosby, USA, MC
Chief, Department of Hematology, Walter Reed Army Institute of Research

2:45–3:00 Diseases Suspected to Be of Autoimmune Etiology

Nathan C. Zvaifler, M.D.
Assistant Professor of Medicine, Georgetown University School of Medicine

3:00–3:15 Questions and Answers

3:15–3:45 Intermission to Visit Exhibits

3:45–4:40 Panel Discussion on Perinatal Mortality

Moderator:

Andrew A. Marchetti, M.D.
Professor and Chief, Department of Obstetrics, Georgetown University School of Medicine

CONTINENTAL ROOM

PANELISTS:

McClemore Birdsong, M.D.
Acting Chairman and Professor of Pediatrics, University of Virginia, Charlottesville

Lester A. Wilson, M.D.
Associate Professor of Obstetrics and Gynecology, University of Virginia, Charlottesville

WEDNESDAY, OCTOBER 17—MORNING SESSION

SHERATON HALL

9:00–12:30 CARDIOVASCULAR DISEASE AMENABLE TO SURGERY: MEDICAL AND SURGICAL ASPECTS

PRESIDING:

Bernard J. Walsh,M.D.
Clinical Professor of Medicine, Georgetown University School of Medicine

MODERATOR:

Owen Gwathmey, M.D.
Medical College of Virginia, Richmond

9:00–9:20 THE SMALL INFANT WITH HEART DISEASE

Catherine A. Neill, M.D., M.R.C.P.
Assistant Professor of Pediatrics and First Assistant to Helen B. Taussig, M.D., Cardiac Clinic, Harriet Lane Home for Invalid Children, Johns Hopkins University Medical Center

9:20–9:40 ATRIAL SEPTAL DEFECTS

Lewis H. Bosher, M.D.
Associate Professor of Surgery, Medical College of Virginia, Richmond

9:40–10:00 AORTIC VALVULAR DISEASE

Charles A. Hufnagel, M.D.
Professor of Surgery, Georgetown University School of Medicine

10:00–10:20 VENTRICULAR SEPTAL DEFECTS

John A. Kirklin, M.D.
Surgeon, Mayo Clinic; Professor of Surgery, Mayo Foundation Graduate School, University of Minnesota, Rochester

CONTINENTAL ROOM

9:00–12:30 TRAUMA AND REHABILITATION

PRESIDING:

John D. Hoyle, M.D.
Clinical Instructor of Surgery, George Washington University School of Medicine

9:00–9:20 IS YOUR EMERGENCY ROOM READY?

John R. McGibony, M.D.
Chief, Intramural Research of Hospital and Medical Facilities, United States Public Health Service

9:20–9:40 THE EMERGENCY ROOM: DIAGNOSIS AND TREATMENT OF ACUTE HEAD INJURIES

J. Peter Murphy, M.D.
Assistant Clinical Professor of Neurosurgery, George Washington University School of Medicine

9:40–10:00 DIAGNOSIS AND TREATMENT OF ACUTE FRACTURES

John P. Adams, M.D.
Clinical Professor of Orthopedic Surgery, George Washington University School of Medicine; Chief, Orthopedic Service, University Hospital

10:00–10:20 DIAGNOSIS AND TREATMENT OF BLUNT CHEST INJURIES

James W. Brooks, M.D.
Assistant Professor of Surgery, Medical College of Virginia, Richmond

10:20–10:40 DIAGNOSIS AND TREATMENT OF BLUNT ABDOMINAL INJURIES

J. Richard Thistlethwaite, M.D.
Associate Clinical Professor of Surgery, George Washington University School of Medicine

SHERATON HALL

10:20–10:40 INDICATIONS FOR AND BENEFITS FROM SURGERY IN ACQUIRED MITRAL VALVE DISEASE

Lawrence B. Ellis, M.D.
Associate Professor of Clinical Medicine, Harvard Medical School; Chief of Cardiac Clinic, Boston City Hospital

10:40–11:00 INTERMISSION TO VISIT EXHIBITS

11:00–12:30 SYMPOSIUM:

Catherine A. Neill, M.D., M.R.C.P.
Lewis H. Bosher, M.D.
Charles A. Hufnagel, M.D.
John A. Kirklin, M.D.
Lawrence B. Ellis, M.D.

12:30–2:00 LUNCHEON RECESS AND VISIT TO EXHIBITS

CONTINENTAL ROOM

10:40–11:00 RESUSCITATION FROM DEATH

Donald W. Benson, M.D.
Professor of Anesthesiology, Johns Hopkins University School of Medicine

11:00–11:30 RECESS TO VISIT EXHIBITS

11:30–11:50 REHABILITATION AFTER MYOCARDIAL INFARCTION

Reno Porter, M.D.
Associate Professor of Medicine, Medical College of Virginia, Richmond

11:50–12:10 REHABILITATION FOLLOWING STROKES AND INJURY

Frederick E. Vultee, Jr., M.D.
Professor of Physical Medicine and Rehabilitation, Medical College of Virginia, Richmond

12:10–12:30 DISCUSSION

WEDNESDAY, OCTOBER 17—AFTERNOON SESSION

SHERATON HALL

PRESIDING: **John M. Evans, M.D.**

Professor of Medicine, George Washington University School of Medicine

2:00–2:15 THE WOLFF-PARKINSON-WHITE SYNDROME: ITS IMPORTANCE IN CLINICAL PRACTICE

Thomas L. Gorsuch, M.D.
Lecturer in Internal Medicine, University of Virginia, Charlottesville

Charles L. Savage, M.D.
Lecturer in Preventive Medicine, University of Virginia, Charlottesville

2:15–2:30 COMPLETE HEART BLOCK—CURRENT THERAPY

Albert J. Wasserman, M.D.
Assistant Professor of Medicine, Medical College of Virginia, Richmond

2:30–2:45 ELECTRICAL CARDIAC STIMULATORS: A REVIEW AND REPORT OF EXPERIENCES WITH THE INTERNAL CARDIAC PACEMAKER

Yale H. Zimberg, M.D.
Assistant Professor of Surgery, Medical College of Virginia, Richmond

2:45–3:15 RECESS TO VISIT EXHIBITS

3:15–3:45 RECENT TRENDS IN THE MEDICAL TREATMENT OF HYPERTENSION

Julian R. Beckwith, M.D.
Professor of Medicine, University of Virginia, Charlottesville

3:45–4:15 THE CLINICAL SIGNIFICANCE AND INTERPRETATION OF SHORTNESS OF BREATH

W. T. Thompson, M.D.
Chairman and Professor, Department of Medicine, Medical College of Virginia, Richmond

4:15–4:30 THE PEACE CORPS

Mr. Jules Pagano
Chief of Professional, Technical and Labor Division, Office of Public Affairs, Peace Corps, Washington, D. C.

The Scientific Exhibit

All Exhibits at the Sheraton-Park Hotel

FLORENTINE FOYER

Space 1
Metastatic Tumors in the Skin
Raymond A. Osbourn, M.D., Washington, D. C.

Space 2
The Use of Visual Aids in Diabetic Teaching
Edward J. Gallagher, M.D., Fairfax Medical Center, Fairfax, Va., and Marian M. Korczowski, M.S., Georgetown University School of Nursing, Washington, D. C.

Space 3
Lymphangiography: Its Therapeutic Application
Captains Fouad A. Halaby, Robert M. Wright, John C. Turner, James H. Freeman, and Louis G. Galdieri, MC, USA, Radiology Service, Walter Reed Army Medical Center, Washington, D. C.

Space 4
Development of a Chemical Pacemaker for Heart Block
Lt. M. J. Folkman, MC, USNR, and Lt. David M. Long, Jr., MC, USNR, Naval Medical Research Institute, National Naval Medical Center, Bethesda, Md.

Space 5
Recognizing the Depressed Patient
Frank J. Ayd, Jr., M.D., Baltimore, Md.

Space 6
A Modern Method for the Differential Diagnosis of Bleeding in the Last Trimester of Pregnancy
Samuel M. Dodek, M.D., F.A.C.S., Edward E. Gahres, M.D., John D. Paul, Jr., M.D., and Solomon N. Albert, M.D., F.A.C.A., Washington Hospital Center, Washington, D. C.

Space 7
Miss Information, Please
Mrs. Elizabeth J. Muldoon, Dietitian, Doctors Hospital, Washington, D. C.

Space 8
The Human Thermostat
Theodor H. Benzinger, M.D., Naval Medical Research Institute, National Naval Medical Center, Bethesda, Md., and Maria Benzinger, M.D., Director, Department of Anesthesiology, D. C. General Hospital, Washington, D. C.

Space 9
Fresh Tissue Demonstration
Section on Pathology and Laboratory Medicine, The Medical Society of the District of Columbia

EXHIBITION HALL

Space 10
Selected Current Clinical Studies of the National Institutes of Health
Clifton K. Himmelsbach, M.D., Associate Director, Clinical Center, National Institutes of Health, Bethesda, Md.

Space 11
Clinical Appearance, Plastic Repair, Microscopic Pathology of Skin Lesions
John E. Alexander, M.D., William Enos, M.D., and Albert Borges, M.D., Falls Church, Va.

Space 12
Traumatic Affections of the Cervical Spine
Eugene G. Lipow, M.D., Washington, D. C., and O. Hugh Fulcher, M.D., Georgetown University School of Medicine, Washington, D. C.

Space 13
Put Syphilis Back in the Differential Diagnosis
Harry Pariser, M.D., and A. F. Marino, Chief Epidemiologist, Venereal Disease Division, Department of Public Health, Norfolk, Va.

Space 14
Plain Abdominal Film Diagnosis
Forrest V. Schumacher, M.D., Washington Hospital Center, Washington, D. C., and Ira J. Green, M.D., Alexandria Hospital, Alexandria, Va.

Space 15
A New Approach to Obstetrics and Gynecology
J. Allan Offen, M.D., Bowie, Md.

Space 16
Clinic for Retarded Children, Bureau of Maternal and Child Health, D. C. Health Department
J. W. Oberman, M.D., F.A.A.P., Director, D. C. Clinic for Retarded Children, Washington, D. C.

Space 17
Middle Ear Photography
Cary N. Moon, Jr., M.D., Charlottesville, Va.

Space 18
Simplified Regional Oncolytic Techniques
Jeanne C. Bateman, M.D., F.A.C.P., and Harry N. Carlton, M.D., Washington, D. C.

Space 19
Total Management of the Allergic Child
Gilbert D. Barkin, M.D., Silver Spring, Md.

Space 20
Plastic Surgery of the Nose
Gordon S. Letterman, M.D., and Maxine A. Schurter, M.D., Washington, D. C.

Space 21
Know Your Vitamins
Sarah J. Brown, Technical Associate, Division of Scientific Activities, Department of Foods and Nutrition, American Medical Association, Chicago, Ill.

Space 22
Hereditary Hemorrhagic Telangiectasia: Surgical Management of Epistaxis
Jack J. Rheingold, M.D., Edward Adelson, M.D., Arnold A. Lear, M.D., Gordon S. Letterman, M.D., and Maxine A. Schurter, M.D., Washington, D. C.

Space 23
Nitrous Oxide Gynecography
Christopher J. Murphy, M.D., Alvin C. Wyman, M.D., and Jean DeVries, R.N., Alexandria Hospital, Alexandria, Va.

Space 24
Prostheses in Cardiovascular Surgery
E. L. Marston, M.D., Silver Spring, Md., W. Ronald Strong, M.D., and John H. Sager, M.D., Washington, D. C.

Space 25
Premature Craniosynostosis
Franklin L. Angell, M.D., Edgar N. Weaver, M.D., and John A. Martin, M.D., Roanoke, Va.

Space 26
Radioisotope Brain Scanning in Diagnosis of Brain Tumors
William T. Spence, M.D., Washington, D. C.

Space 27
Aortic Abnormalities
Edward D. Soma, M.D., and H. L. Twigg, M.D., Georgetown University Hospital, Washington, D. C.

Space 28
Current Concepts in the Diagnosis and Treatment of Head and Neck Cancer
John F. Potter, M.D., Head, Division of Oncologic Surgery, Georgetown University School of Medicine, Washington, D. C.

Space 29
Air Splints—for Emergency Treatment of Fractures
E. D. Vere Nicoll, M.D., Assistant Professor of Orthopedic Surgery, University of Virginia, Charlottesville, Va.

Space 30
Studies in Sickle Cell Disease: Involvement of the Nervous System
Roland B. Scott, M.D., Howard University and Freedmen's Hospital; Robert L. Baird, M.D., D. C. General Hospital; Joseph H. French, M.D., Howard University; Daniel L. Weiss, M.D., Department of Pathology, D. C. General Hospital; and Angella D. Ferguson, M.D., Howard University and Freedmen's Hospital, Washington, D. C.

Space 31
Intralesional Triamcinolone in Localized Dermatoses
Marc Allen Weiner, M.D., Georgetown University School of Medicine, Washington, D. C.

Space 32
Study of Newborns in the State of Virginia
Robert H. Anderson, M.D., and Thistle M. McKee, M.D., Alexandria, Va.

Space 33
Medical Lessons of the Past—Prologue to the Future
Colonel John Boyd Coates, Jr., MC, USA, Walter Reed Army Medical Center, Washington, D. C.

Space 34
Craniotomy Without the Necessity of Removing the Hair
Jonathan M. Williams, M.D., Washington, D. C.

Space 80
Respiratory Disease: Diagnosis and Treatment
D. C. Tuberculosis Association, Washington, D. C., and Virginia Tuberculosis Association, Richmond, Va.

Space 81
Value of Early Diagnosis
American Cancer Society, D. C. Division, Washington, D.C.

Parking Privileges

Members of the Medical Society of the District of Columbia who wish to drive to the Assembly meetings may use any of the three parking facilities available at the Sheraton-Park Hotel:

Main Lot—adjacent to the Hotel on Woodley Road
Cotillion Garage—to the rear of Main Lot
Calvert Street Garage—opposite Shoreham Hotel

There is also ample street parking available in the neighborhood. There will be free parking facilities for all registered guests.

Medical Motion Pictures

All Motion Pictures at Sheraton-Park Hotel

BURGUNDY ROOM

MONDAY, OCTOBER 15, 1962

Time	*Titles*	*Sponsors*
9:00	Cerebral Vascular Disease—Challenge of Diagnosis	American Heart Association, New York, N. Y.
9:30	Renal Arteriography—Transfemoral Technique	Robert G. Weaver, M.D., Salt Lake City, Utah
9:52	Angina Pectoris	Samuel A. Levine, M.D., Boston, Mass.
10:50	Coronary Occlusion	Samuel A. Levine, M.D., Boston, Mass.
11:25	Atherosclerosis and the Role of Estrogens	Ayerst Laboratories, New York, N. Y.
12:00	Lunch Break or "Encore Hour"	
1:00	* Surgical Treatment of Ventricular Septal Defects: Experience in 300 Cases	Denton A. Cooley, M.D., Houston, Texas
1:20	* Endoscopy of the Bile Ducts	C. J. Schein, M.D., E. S. Hurwitt, M.D. and A. Herskovitz, M.D., New York, N. Y.
1:30	Ligation and Stripping in the Treatment of Varicose Veins	John L. Keeley, M.D. and Arne E. Schairer, M.D., Chicago, Ill.
1:53	Open Fractures	Veterans Administration, Washington, D. C.
2:21	Treatment of Abdominal Penetrating Wounds in Civilian Practice	William A. Altemeier, M.D., Cincinnati, Ohio
2:51	Reduction Mammoplasty for Massive Pendulous Breasts	Philip Thorek, M.D., Chicago, Ill.
3:13	Proctosigmoidoscopy in Office Practice	Emerson Day, M.D., and Ralph E. Hertz, M.D., New York, N. Y.
3:28	Transvesicocapsular Prostatectomy	Guy W. Leadbetter, Jr., M.D., and Wyland F. Leadbetter, M.D., Boston, Mass.
3:48	Hospital Maternity Care: Family Centered	St. Mary's Hospital, Evansville, Ind.
4:16	Manual Removal of the Placenta	Bruce Mayes, M.D., Sydney, Australia

TUESDAY, OCTOBER 16, 1962

Motion pictures listed below were produced by physicians within the general area of the District of Columbia and Virginia. Authors or representatives will be present during the presentation of their films. Time will be allowed for commentary and discussion.

Time	*Titles*	*Sponsors*
9:00	Emergency Childbirth	Department of the Navy, Washington, D. C.
9:21	* Simple Method for Tracheal Suction and Bronchoscopy	Walter Reed Army Medical Center, Washington, D. C.
9:32	* Physical Medicine in the Treatment of the Adult Hemiplegic Patient	Walter Reed Army Medical Center, Washington, D. C.
9:58	* Introduction to Respiratory and Cardiac Resuscitation	Walter Reed Army Medical Center, Washington, D. C.
11:00	Children in Search of a Self	William M. Lordi, M.D., Richmond, Va.
11:21	Amniotic Band Elephantiasis	Alberto F. Borges, M.D., Falls Church, Va.
11:31	A One-stage Hypospadias Repair on a Patient Previously Operated 15 Times Unsuccessfully	Charles E. Horton, M.D., Norfolk, Va.
1:00	* Cystic Fibrosis	Lucas L. Kulczycki, M.D., Washington, D. C.
1:35	Gastrointestinal Ciné Radiography	L. O. Snead, Jr., M.D., Richmond, Va.
1:50	Hysterocolpectomy	Oliver C. Cox, M.D., Washington, D. C.
2:15	* Left Colon Transplant for Esophageal Replacement	William D. Byrne, M.D., Washington, D. C.

---

* Tentatively scheduled.

Medical Motion Pictures—Burgundy Room

2:45	* Oxygen Therapy—Theory and Procedures	Major Richard D. Reese, MSC, USAF, Office of the Surgeon General, Washington, D. C.
3:10	* Radical Resection of Ischial Tuberosities in Paraplegia	J. T. O'Hanlan, M.D., Waynesboro, Va.
3:28	Repair of Median Episiotomies Including Third Degree Lacerations	Robert H. Barter, M.D., Washington, D. C.
3:48	The Use of Radioactive Colloidal Gold for Treatment of Inoperable Carcinoma Prostate	Louis B. Bachrach, M.D., Washington, D. C.
4:08	Parosteal Sarcoma	John S. Thiemeyer, Jr., M.D., Norfolk, Va.

WEDNESDAY, OCTOBER 17, 1962

Time	*Titles*	*Sponsors*
9:00	* Medical Genetics, Part I	The National Foundation, New York, N. Y.
9:33	* Medical Genetics, Part II	The National Foundation, New York, N. Y.
10:04	Blood Fractions in Clinical Medicine	Merck Sharp & Dohme, West Point, Pa.
10:29	* Diabetes in Youth	Elliott P. Joslin, M.D., Boston, Mass.
1:00	* Physical Diagnosis—The Neck	Stewart Wolf, Jr., M.D., Oklahoma City, Okla., and Frederick J. Margolis, M.D., Detroit, Mich.
1:30	Essentials of the Neurological Examination	Francis A. Vazuka, M.D., Philadelphia, Pa.
2:20	Examination of the Peripheral Joints	Paul J. Bilka, M.D., Minneapolis, Minn.
2:47	Emotional Factors in General Practice—Their Recognition and Management	H. E. Lehmann, M.D. and Nathan B. Epstein, M.D., Montreal, Canada
3:30	* The Diagnosis of Viral Meningitis	The National Foundation, New York, N. Y.
4:02	The Anatomy of the Human Ear—A Dissection under the Zeiss Microscope	J. Duncan Gray, F.R.C.S., Sheffield, England

---

* Tentatively scheduled.

AAGP Participation

Both the District of Columbia and Virginia Chapters of the American Academy of General Practice have notified their members that the Second Interstate Scientific Assembly has the official sanction of the Commission on Education of the American Academy of General Practice for formal postgraduate credit to Academy members who attend this meeting.

In view of the active interest in the Assembly of officers of both Chapters it is expected that there will be a large attendance by general practitioners.

Annual Dinner

The program for this year's Annual Dinner, to be held on Tuesday evening, October 16, will place emphasis on fun and enjoyment while speeches will be held to the barest minimum. Preceding the dinner will be a cocktail party sponsored by Peoples Drug Stores, and following the dinner there will be dancing to the orchestra of Mr. Sammy Ferro, courtesy of Burton, Parsons and Company.

See Registration, page 549, for details about ticket sales for the dinner.

Registration

PRE-REGISTRATION AT THE SOCIETY'S EXECUTIVE OFFICES

As in previous years, arrangements have been made to register members of the Medical Society of the District of Columbia prior to the opening of the ASSEMBLY at the Society's Executive Offices on Thursday and Friday, October 11 and 12, from 9 a.m. to 4:45 p.m. Members who find it convenient to register at these times will avoid being detained at the regular Registration Station at the Sheraton-Park Hotel the following week.

REGISTRATION AT THE SHERATON-PARK HOTEL

The Registration Station will be set up in the Esplanade of the Sheraton-Park Hotel and will be open on Sunday from 1 to 5:00 p.m. and on Monday morning at 8 to permit everyone to register in time for the opening session.

The Registration Station will be divided into three departments: one for the registration of members of the Medical Society of the District of Columbia, guest physicians, interns, residents, exhibitors, etc.; one for the registration of Medical Society of Virginia members; and another section to be devoted to the sale of tickets for the Annual Dinner and various luncheons and dinners sponsored by the alumni and specialty groups.

The usual procedure will be followed in the District of Columbia for the Annual Dinner, formal invitations being extended to physicians and their guests. For the convenience of those desiring to reserve tables, reservation cards, which will be enclosed with the invitations, should be returned to the Society's Offices. There will be advance ticket sales for the Dinner and dance; however, there will be no prior seat designations. *Tables will only be reserved upon request for parties of eight or more.*

Tickets for the Annual Dinner will be $12.50 per person. The Dinner will be preceded by a cocktail party, through the courtesy of Peoples Drug Stores, and will be followed by dancing to the orchestra of Mr. Sammy Ferro, through the courtesy of Burton, Parsons and Company.

Assembly Calendar

All Meetings at the Sheraton-Park Hotel Unless Otherwise Indicated

SUNDAY, OCTOBER 14, 1962

9:30 A.M.	Virginia Academy of General Practice, Board of Directors—Franklin Room
12:00 Noon	Luncheon—Council Meeting, The Medical Society of Virginia—Madison Room
12:30 P.M.	Luncheon—Virginia Society of Anesthesiology—Assembly Room
1:00 P.M.	Registration—Esplanade
3:00 P.M.	Registration for Woman's Auxiliary—Esplanade
4:00 P.M.	Woman's Auxiliary Pre-convention Board Meeting—Hamilton Room
7:00 P.M.	House of Delegates of The Medical Society of Virginia, Banquet—Cotillion Room

MONDAY, OCTOBER 15, 1962

8:00 A.M.	Registration—Esplanade
8:00 A.M.	Breakfast—Virginia Diabetes Association—Adams Room
9:00 A.M.	Council, The Medical Society of Virginia—Madison Room
9:00 A.M.	Scientific Program
9:00 A.M.	Medical Motion Pictures
9:30 A.M.	Woman's Auxiliary Virginia—Annual Meeting—Assembly Room

1:00 P.M. Luncheon (Inaugural)—Woman's Auxiliary—Cotillion Room
12:15 P.M. Luncheon—George Washington University Medical Alumni Association—Continental Room
12:30 P.M. Luncheon—Virginia Society of Ophthalmology and Otolaryngology—Franklin Room
Luncheon—Virginia Society of Plastic Surgery—Woodley Room
Luncheon—Virginia Urological Society—Adams Room
Luncheon—Virginia Orthopedic Society—Hamilton Room
Luncheon—Virginia Society of Chest Physicians—Madison Room
1:00 P.M. Medical Motion Pictures
2:00 P.M. Scientific Program
2:00 P.M. Reference Committee #1, The Medical Society of Virginia—Assembly Room
2:00 P.M. Reference Committee #2, The Medical Society of Virginia—Franklin Room
6:00 P.M. Cocktail Party—University of Virginia—Adams and Hamilton Rooms
Cocktail Party—Medical College of Virginia—Franklin Room
Cocktail Party—Duke Medical Alumni—Assembly Room
7:00 P.M. Banquet—Medical College of Virginia—South Cotillion Room
Banquet—Duke Medical Alumni—Assembly Room

TUESDAY, OCTOBER 16, 1962

7:30 A.M. Breakfast for Past Presidents—Woman's Auxiliary—Adams Room
8:00 A.M. Breakfast—Executive Committee, Virginia Society of Internal Medicine—Madison Room
Breakfast—Woman's Auxiliary—Adams Room
8:30 A.M. Registration—Esplanade
8:30 A.M. Bus Tour (special tour of White House)
9:00 A.M. Scientific Program
9:00 A.M. Medical Motion Pictures
11:00 A.M. Woman's Auxiliary Post-Convention Board Meeting and Workshop—Hamilton Room
12:30 P.M. Luncheon—Virginia Section of American College of Physicians and Virginia Society for Internal Medicine—Madison Room
Luncheon—Virginia Academy of General Practice—South Cotillion Room
Luncheon—Virginia Pediatric Society—Adams Room
Luncheon—Virginia Surgical Society—Assembly Room
Luncheon—Virginia Obstetrical and Gynecological Society—Franklin Room
1:00 P.M. Medical Motion Pictures
2:00 P.M. Scientific Program
4:00 P.M. House of Delegates, The Medical Society of Virginia—South Cotillion Room
6:30 P.M. Cocktail Party (courtesy Peoples Drug Stores)—Florentine Foyer
7:30 P.M. Annual Dinner of the Medical Society of the District of Columbia and The Medical Society of Virginia—Sheraton Hall
9:00 P.M. Dancing to Sammy Ferro Orchestra (courtesy, Burton, Parsons and Company)

WEDNESDAY, OCTOBER 17, 1962

8:30 A.M. Registration—Esplanade
9:00 A.M. Scientific Program
9:00 A.M. Medical Motion Pictures
12:30 P.M. Luncheon—Virginia Medical Service Association—Assembly Room
Luncheon—Georgetown University Medical Alumni Association—Cotillion Room
1:00 P.M. Medical Motion Pictures
2:00 P.M. Scientific Program

The Technical Exhibit

The Technical Exhibit will be on display in Exhibition Hall. A list of the exhibitors follows:

Exhibitor	*Booth No.*
Abbott Laboratories	46
A. S. Aloe Company	4
American Casualty Company	8
American Fore Loyalty Group	10
Arcum Pharmaceutical Corporation	36
Ayerst Laboratories	43
Baker Laboratories	45
Beth-Mont Surgical Supply Company	53
Beuchler's, Inc.	83
The Birtcher Medical Distributors of D. C.	29
The Borden Company	34
Boyce & Lewis, Inc.	52
Burroughs Wellcome & Company (USA), Inc.	72
Burton, Parsons & Company	47
Capital Credit Corporation	59
The Chloraseptic Company	5
Ciba Pharmaceutical Company	24
Coca-Cola Company	41
Columbia Electronics Corporation	74
Davies, Rose & Company	3
Desitin Chemical Company	60
The Dietene Company	11
Eaton Laboratories	75
C. B. Fleet Company	68
Geigy Pharmaceuticals	44
Charles C. Haskell & Company	50
H. J. Heinz Company	57
Holland-Rantos Company, Inc.	73
Nelson Kloman Surgical Supply Company	6
Knoll Pharmaceutical Company	19
Lederle Laboratories	37
Eli Lilly & Company	49
Lloyd Brothers, Inc.	71
Maxwell & Tennyson	23
McNeil Laboratories, Inc.	30
Mead Johnson & Company	51
Medco Products & Company, Inc.	15
Merck, Sharp & Dohme	58
The William S. Merrell Company	14

Exhibitor	*Booth No.*
C. V. Mosby Company	54
Mutual Benefit Life Insurance	12
Hermien Nusbaum & Associates	78
Organon Inc.	13
Ortho Pharmaceutical Corporation	55
Peoples Drug Stores, Inc.	7
Pepsi-Cola Company	76
Pfizer Laboratories	40
Physicians Products Company, Inc.	56
Playtex	67
William P. Poythress & Company, Inc.	2
Professional Business Management	79
Quaker City Pharmacal Company	82
R. J. Reynolds Tobacco Company	17
Richmond Surgical Supply Company	9
Riker Laboratories, Inc.	20
A. H. Robins Company, Inc.	65
Roche Laboratories	35 & 69
J. B. Roerig & Company	48
St. Paul Fire & Marine Insurance Company	16
Sanborn Company	61
Sandoz Pharmaceuticals	39
W. B. Saunders Company	22
Schering Corporation	18
Julius Schmid, Inc.	38
G. D. Searle & Company	25
Smith, Kline & French Laboratories	33
Smith, Miller & Patch, Inc.	42
E. R. Squibb & Sons	31
The Stuart Company	32
The Upjohn Company	66
U. S. Vitamin Corporation	64
Van Pelt & Brown, Inc.	1
Walker Laboratories, Inc.	62
Wallace Laboratories	70
Wampole Laboratories	28
Warner-Chilcott Laboratories	26
White Laboratories, Inc.	27
The Williams & Wilkins Company	21
Winthrop Laboratories	77
W. T. S. Pharmaceuticals	63

COMMITTEE ON ARRANGEMENTS

C. Willard Camalier, Jr., M.D.
General Chairman (D. C.)

James M. Moss, M.D.
Co-Chairman (Va.)

COMMITTEES

PROGRAM COMMITTEE

Bernard J. Walsh, M.D., *Chairman* (D. C.)
Owen Gwathmey, M.D., *Co-Chairman* (Va.)

Frederic G. Burke, M.D. (D. C.)
Ernest A. Gould, M.D. (D. C.)
Paul R. Wilner, M.D. (D. C.)

Robert L. Cassidy, M.D. (Va.)
John D. Hoyle, M.D. (Va.)
Kinloch Nelson, M.D. (Va.)

Richard E. Palmer, M.D. (Va.)

COMMITTEE ON SCIENTIFIC EXHIBIT

Alvin C. Wyman, M.D., *Chairman* (Va.)
Milton L. Goldman, M.D. (D. C.)
Raymond A. Osbourn, M.D. (D. C.)

Jed W. Pearson, M.D., *Co-Chairman* (D. C.)
Frank M. Blanton, M.D. (Va.)
Eugene L. Lowenberg, M.D. (Va.)

COMMITTEE ON MEDICAL MOTION PICTURES

Joel B. Hoberman, M.D., *Chairman* (D. C.)
F. Turner Reuter, M.D. (D. C.)

Wallace Baker, M.D., *Co-Chairman* (Va.)
Charles Derrickson, M.D. (Va.)

George Lemeshewsky, M.D. (Va.)

COMMITTEE ON SOCIAL AFFAIRS

Arthur E. White, M.D., *Chairman* (Va.)
Brooks G. Brown, M.D. (D. C.)
Alejandro F. Castro, M.D. (D. C.)
W. Robert Perkins, M.D. (D. C.)
Leonard T. Peterson, M.D. (D. C.)
Lawrence A. Rapee, M.D., (D. C.)
Duane C. Richtmeyer, M.D. (D. C.)
M. Noel Stow, M.D. (D. C.)

Marcel J. Foret, M.D., *Co-Chairman* (D. C.)
John E. Alexander, M.D., (Va.)
Robert H. Anderson, M.D. (Va.)
Frank A. Carroll, M.D. (Va.)
William D. Dolan, M.D. (Va.)
Edward J. Gallagher, M.D. (Va.)
William E. Sheely, M.D. (Va.)
Sidney A. Tyroler, M.D. (Va.)

FINANCE COMMITTEE

Peter Soyster, M.D., *Chairman* (Va.)
Robert U. Cooper, M.D. (D. C.)

Leon Gerber, M.D., *Co-Chairman* (D. C.)
James Mills, M.D. (Va.)

COMMITTEE ON PUBLICITY

Paul R. Wilner, M.D., *Chairman* (D. C.)
Joseph H. Watson, M.D. (D. C.)
R. Lomax Wells, M.D. (D. C.)

Allan Hall, M.D., *Co-Chairman* (Va.)
Harry B. Beatty, M.D. (Va.)
L. J. DeVocht, M.D. (Va.)

ADMINISTRATIVE STAFF

Mr. George W. Cooley
Executive Director (D. C.)
Mr. Frederick E. Trust
Exhibit Manager (D. C.)

Mr. Robert I. Howard
Executive Director (Va.)
Mr. Edward F. Smith, Jr.
Assistant Executive Secretary (Va.)

AMA House of Delegates

A Report of D. C. Delegates

A HEAVY AGENDA of work was faced by all delegates to the Chicago meeting, June 25–28. Pertinent actions of the House can be summarized as follows:

1. Opposition to the King-Anderson bill and reaffirmation of support for Kerr-Mills Law with urging that implementation of Kerr-Mills be speeded.

2. Medical disciplinary power of the AMA increased by allowing Judicial Council to enter into a case when requested by the State or Component Society concerned or when AMA requests and the State or Component Society consents to AMA disciplinary proceedings. Any resulting action is to be concerned solely with AMA membership; not with local membership.

3. Adopted recommendation to increase Board of Trustees from 11 to 15 members by electing there members and adding the immediate past president. Also, reduced elected Trustees' terms from five to three years, with a maximum of three terms. These will be submitted as changes in the Constitution and By-laws at the Clinical Meeting in November 1962.

4. The American Board of Abdominal Surgery was denied recognition after careful study which concluded that the present and potential contribution of such a board based on an anatomical region of the body is inadequate.

5. As regards the use of surgical assistants in the operating rooms and the apparent conflict with the American College of Surgeons on this issue, the House declared the adoption and interpretation of the Principles of Medical Ethics are the prerogative and duty of the AMA and restated its June 1961 policy to the effect that every physician who cares for a patient is entitled to payment for services rendered and that separate bills shall be rendered. It was also stated that it is permissible for a surgeon, under certain circumstances and where hospital staff regulations permit, to engage other physicians to assist him and to pay reasonable amounts for such assistance.

6. Agreed that need for application of prepayment or insurance principle applies to all ages, not to aged alone; that those able to pay should be encouraged, not compelled to do so; that persons financially unable to pay may properly be assisted to the degree necessary by their communities, their states, and, if these fail, by the Federal Government, but only if in conjunction with other governmental levels; that there should be no governmental control; and that protection must be reasonably comprehensive rather than token in character.

7. Referred to the Board of Trustees a proposal to limit the number of salaried personnel of a medical school or university on the Council on Medical Education and Hospitals.

8. Urged seat belts be made standard equipment in automobiles.

9. Reaffirmed opposition to compulsory Social Security coverage for physicians.

10. Announced a one-year study on the relationship between tobacco and disease.

11. Elected Dr. Edward Annis of Florida, head of the AMA Speakers Bureau, as President-elect.

The D.C. delegates, along with alternate delegate, Dr. Clifton Gruver, met with the Board of Trustees to express the Society's views on the use of voluntary coverage if public funds continue to become more and more available for medical care.

Two subjects discussed at the AMA meeting needing local consideration were presented to the D.C. Medical Society's Executive Board for consideration. These were:

1. No stand has as yet been taken by this Board or Society on those proposals which suggest giving tax credits to the aged or others purchasing voluntary health coverage. It is recommended that a policy statement be prepared.

2. The sponsoring of a mass immunization program utilizing the Sabin oral polio vaccine in conjunction with neighboring counties should be considered from the public health and public relations standpoints. Such a program sparked by the Cleveland Academy of Medicine resulted in 94 per cent of the entire population of that area receiving this protection. It is recommended that this matter be considered at this time.

Respectfully submitted,

RAYMOND T. HOLDEN, M.D., *Delegate*
C. WILLARD CAMALIER, JR., M.D., *Delegate*
CLIFTON R. GRUVER, M.D., *Alternate Delegate*

Cancer, including leukemia, kills more children than any other disease

Remember, Doctor:

1. The accelerated growth of certain neoplasms in infants and children may simulate the symptoms of acute infectious syndromes with none of the usual signs of malignancy, such as wasting, anemia, anorexia, etc.
2. Except for tumors of the central nervous system and leukemias, neoplasms of children usually manifest themselves by the presence of a tumor mass which, in a brief time, may obtain considerable size.
3. Bleeding from any orifice should be a source of concern.
4. Listlessness and pallor are the most significant signs of leukemia. Later signs of the disease are petechiae and splenomegaly.
5. Every solid mass in infants and children should be considered malignant until investigated and proven otherwise.
6. A minimum of handling is desirable after the initial examination, with palpation of tumors restricted.
7. Surgery should be undertaken as expeditiously as good clinical evaluation proves sound.
8. Chemotherapy and steroids have a place in therapeutic régime.

RESEARCH
EDUCATION
SERVICE

A film, **"Tumors of Childhood"**
is available for showing to physicians.

Call or Write

American Cancer Society
District of Columbia Division, Inc.
810–18th Street, N.W.
Washington 6, D.C.
EXecutive 3-3690

Dr. Dodek Honored by Students' Society

SAMUEL M. DODEK, M.D.

Recipient of Obstetrical Honor Society Award

Upon the occasion of the twenty-fifth anniversary of the A.F.A. King-Howard F. Kane Obstetrical Society, an honorary students' society of George Washington University School of Medicine, the graduating Class of 1962 presented a plaque to Dr. Samuel M. Dodek "in gratitude and affection for his inspiration, leadership and service to the Society." Dr. Dodek, Associate Clinical Professor of Obstetrics and Gynecology, founded the Society 25 years ago and has been its faculty advisor since that time.

The Society was originally named to honor Dr. Alfred Freeman Africanus King, Professor of Obstetrics and Dean of George Washington University School of Medicine from 1871 to 1913. Dr. Howard Francis Kane, Professor of Obstetrics and Gynecology in the same institution, from 1934 to 1945, was its first Honorary President. Upon the death of Dr. Kane in 1946, the organization was renamed to honor both of these distinguished physicians. Dr. John L. Parks, presently Dean of the School of Medicine and also Professor of Obstetrics and Gynecology, is now Honorary President.

The Society's membership is made up of 30 honor students, 15 from the Junior Class who have attained the highest grades in obstetrics and gynecology and the 15 senior students who were elected the previous year.

Studies of Reiter's Syndrome and Chronic Myelogenous Leukemia

The coöperation of physicians is earnestly solicited in the referral of patients for a study of Reiter's syndrome conducted by the National Institute of Arthritis and Metabolic Diseases in the Clinical Center of NIH at Bethesda, Md. Renewed efforts are being made to recover and identify the causative agent of Reiter's syndrome.

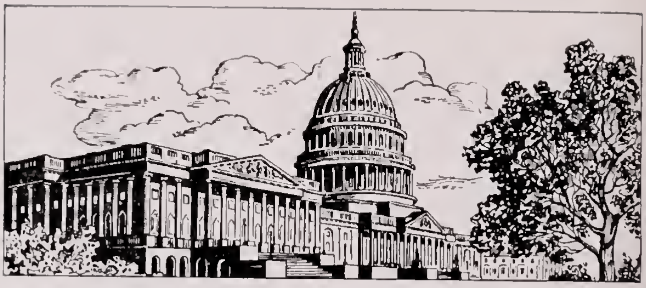
Reiter's syndrome is characterized by a triad of arthritis, urethritis and conjunctivitis. Cases lacking conjunctivitis would still qualify for this study. The presence of gonococcus and urethral discharge would not preclude a case from this study, provided this organism is not present in the synovial fluid. The appearance of cutaneous manifestations (balanitis, keratodermia blennorrhagica, maculopapular eruption on penis, hard papules on soles) help clinch the diagnosis. Reiter's syndrome lasts for an average of six weeks and recurs in about 50 per cent of the cases. Most desirable are cases within the first two weeks of onset.

Accepted patients will be studied for several weeks. Upon completion of their study, patients will be returned to the care of their referring physician, who will receive a complete narrative summary.

Physicians who wish to have patients considered for this study may write or telephone Dr. Joseph J. Bunim, Clinical Director, National Institute of Arthritis and Metabolic Diseases, Bethesda 14, Md.

Referrals of patients with chronic myelogenous leukemia are needed, particularly those in the 20- to 40-year age group with high white blood cell counts and platelet counts, for studies of newer chemotherapeutic agents and as a source of white cells and platelets for in vitro and in vivo study.

Physicians who wish to have their patients considered for the study may write or telephone Dr. Paul P. Carbone, Chemotherapy Service, Medicine Branch, National Cancer Institute, Bethesda 14, Maryland; telephone 496-4251.



NEWS & PERSONALS

Meetings

The Cancer Morbidity Review Committee of the D. C. Medical Society is beginning its fifth year of study of pelvic carcinoma in coöperation with eight D. C. hospitals and the Clinical Center of the National Institutes of Health.

Case Review meetings are held monthly through the year except during the summer. A general invitation is posted in each hospital and special invitations are sent to many physicians. It is believed that through these Case Review meetings the use of better methods of cancer detection and treatment has been promoted.

The Committee welcomes the participation of all interested members of the Medical Society. The next meeting will be held on Tuesday, October 23, from 4 to 5 p.m., in the Library of the Medical Society's Building. Please call the Medical Society's offices (District 7-3111) if you wish to be placed on the special mailing list for notices of future meetings.

A Cardiac Symposium, sponsored by the Washington Heart Association and the Maryland Heart Association, will be held, September 27, at the National Institutes of Health in Bethesda, and a cordial invitation is extended to all members of the Medical Society to attend the day-long scientific sessions.

The day's program will be concerned with cardiovascular drugs. A Symposium on Control of the Cardiovascular System by the Autonomic Nervous System will be held in the evening, beginning at 8:00 p.m.

Dr. Bernard Lown, of the School of Public Health, Harvard University, will be one of the principal speakers. Speakers from the National Heart Institute will include Drs. Edward J. Leonard, Dean T. Mason, Robert W. Berliner, Stanley J. Sarnoff, John Ross, Jr., Davis Horwitz, Charles A. Chidsey, and Donald C. Harrison. Other speakers from the National Institutes of Health will be Dr. Dean Morrow and Dr. Vernon Knight. Also participating in the program will be Dr. E. Hugh Luckey, of Cornell University School of Medicine; Dr. Frank A. Finnerty, of Georgetown University School of Medicine; and Dr. Edward D. Freis, of Mt. Alto Veterans Administration.

The program-planning committee consists of Dr. Eugene Braunwald, Chief of Cardiology, National Heart Institute; Dr. John J. Curry, of Silver Spring, Md.; and Dr. W. Proctor Harvey, Chief of Cardiology at Georgetown University School of Medicine.

The 19th Annual Meeting of the American Medical Writers' Association will convene at the Sheraton-Park Hotel in Washington, October 12 and 13, 1962. The theme of the meeting is "The Information Explosion—Its Challenge and Problems."

The first day will be devoted to what medical journal editors, authors, and educators can do to meet the challenge of the flood of new medical information. On the second day the meeting will consider the recent advances in information storage and retrieval, utilization of the "newer" communication media (films, radio, TV, etc.), and professionalism among medical communication personnel.

The Program Committee has secured outstanding leaders, who represent all phases of medical communications media, to take part in the program. Some of them are: Dr. James M. Hundley, Assistant Surgeon General of the Public Health Service; Brig. General Charles H. Roadman, MC, USAF, of the National Aeronautics and Space Administration; Dr. Joseph Garland, Editor of the *New England Journal of Medicine*; Colonel John B. Coates, MC, Director of the Historical Unit, U. S. Army Medical Service; Dr. Ernest B. Howard, Assistant Executive Vice President of the American Medical Association; and Dr. I. Phillips Frohman, member of the Editorial Board of the MEDICAL ANNALS OF D. C.

Dr. Robert J. Benford, Washington, is President of the Mid-Atlantic Chapter, host to the convention.

Program and registration forms may be secured from Mr. John Sargeant, Chairman of the Local Arrangements Committee, Medical and Chirurgical Faculty of Maryland, 1211 Cathedral Street, Baltimore 1, Md.

The 14th Annual Scientific Assembly of the Maryland Academy of General Practice will be held at the Hotel Alexander in Hagerstown, Md., Saturday and Sunday, October 13 and 14.

The morning program, October 13, will open with a paper on "The Use of Physical Medicine by the GP" by Dr. Edwin Matlin of Garden City, N. Y. The afternoon will be devoted to a Panel Discussion on Neurological Disorders moderated by Dr. A. Earl Walker, of Johns Hopkins University School of Medicine. One of the panelists will be Dr. Harold Stevens, Professor of Neurology, George Washington University School of Medicine.

Three papers will be presented during the morning of October 14. One of the speakers, Dr. John C. Walsh, Clinical Instructor in Obstetrics and Gynecology, George Washington University School of Medicine, will discuss "Gynecological Problems of Teenagers." The afternoon session will feature a paper by Dr. Theodore A. Schwartz and a Clinico-Pathologic Conference by Drs. John A. Wagner and Charles Van Buskirk, all three from the University of Maryland faculty.

An invitation is extended to all members of the D. C. Medical Society to attend these meetings.

The Washington Diabetes Association will hold a one-day **Symposium on Diabetes** at the Washington Hospital Center, December 13. All physicians are welcome; there will be no registration fee. When more details are available they will be announced in the MEDICAL ANNALS.

Boards & Committees

Dr. James W. Watts presided at the July 23 meeting of the **Executive Board of the Medical Society of the District of Columbia.** President Dryden submitted the names of Drs. William T. Spence, William H. Ferguson, Oscar B. Hunter, Jr., and L. Conner Moss to the new Committee on Armed Forces and Veterans Affairs which was created by the Board at its meeting on June 18. The Board approved the appointees.

Dr. C. Willard Camalier, Junior Delegate to the American Medical Association, read the delegates' report on the actions taken by the AMA's House of Delegates at its Annual Meeting in June. He submitted the report in behalf of himself and the Senior Delegates, Dr. Raymond T. Holden and Dr. Clifton R. Gruver. The Board accepted the report with an expression of appreciation to the delegates.

The Executive Board also took the following actions:

a. Voted to appoint a committee to develop a policy statement on tax credits for those purchasing voluntary health insurance (selected to the committee are Drs. Camalier and Corley);

b. Reviewed present plans for the mass polio immunization program, reiterated approval of the project, and agreed to a voluntary contribution of 25 cents per immunized person to assist in its financing;

c. Agreed that in creating a section on thoracic and cardiovascular surgery the Board had carried out its functions, and activation of the section must await approval of changes in the Constitution and By-laws at the Annual Business Meeting;

d. Approved the list of nominees to the Nominating Committee as submitted by Dr. Dryden; and

e. Referred the problem of water pollution of streams in this area to the Committee on Public Health.

The following Committees which held meetings during July were reported to the Board:

July 6	Review Board for Prepaid Medical Care Benefits
12	Traffic Committee
12	Subcommittee on Child Welfare
13	Motion Picture Committee, Second Interstate Scientific Assembly
17	Grievance Committee
17	Cancer Control Committee
19	Poliomyelitis Committee
19	Board of Credentials

Secretary Cooley reported that he had employed Mr. Fred Trust, of Arlington, Va. as Assistant Executive Director.

Dr. Samuel Shwartz, Chief of the Bureau of Maternal and Child Health, D. C. Health Department, was appointed to the Obstetrical Board succeeding Dr. Ella Oppenheimer, who has retired. The appointment was made upon the recommendation of Dr. C. K. Fraser, Chairman of the Board, and Dr. Frederick C. Heath, Acting Director of the Department of Health. Also in accordance with a suggestion from Dr. Fraser, the Board voted to send a letter to Dr. Oppenheimer expressing the appreciation of the Society for her devoted services to the Board.

Dr. Dorothy A. Starr was appointed to the Committee on Mental Health to suceed Dr. George W. Metcalf, who has resigned. The appointment was made by President Dryden upon the recommendation of Dr. Zigmond M. Lebensohn, Chairman of the Committee.

Dr. Dryden advised the Board that he had named Dr. Preston A. McLendon to serve on a special committee established by the District of Columbia to study the problem of juvenile delinquency and its prevention. Dr. McLendon asked for a subcommittee to assist him on this project. His choice of committee members was approved by the Board; they are Drs. Sidney L. Werkman, Walter A. Combs and Samuel Diener.

The Society's Annual Business Meeting for 1963 was scheduled by the Board to be held on Wednesday, November 13, 1963.

Membership

The following applicants for membership were duly elected to membership by the Executive Board, July 23, 1962, in accord with Chapter II, Article VIII, of the Constitution and By-laws of the Society.

Active Members

Richard H. Edenbaum, 1800 Eye Street, N.W.
Abner Golden, Georgetown University Hospital
James B. Kludt, 1703 Rhode Island Avenue, N.W.
Richard B. Perry, 1150 Connecticut Avenue, N.W.
Alan M. Weintraub, 3801 S Street, N.W.
Robert S. Wilkinson, Jr., 1025 Vermont Avenue, N.W.

Associate Members

Cesar M. Madarang, 1430 Rhode Island Avenue, N.W.
Whitney G. Sampson, 5033 Eighth Road, Arlington 4, Va.
Ali Riza Sarioglu, 3700 Massachusetts Avenue, N.W.

Resident-Intern Member

Charles D. Daily, Jr., Washington Hospital Center

General News

The National Security Agency at Fort George G. Meade, Maryland, requires the **services of two physicians.** The positions carry a salary of $11,935 to $13,510, depending upon individual qualifications. The applicant must be a native born American citizen, preferably under 50 years of age. The work week is five days (40 hours). Inquiries should be addressed to the Director, National Security Agency, Fort George G. Meade, Maryland, attention M342, or telephone Edward F. Barr, Parkway 5-4400, ext. 7881.

Dr. Lowell T. Coggeshall, Vice President and Professor of Medicine at the University of Chicago, has been named chairman of the prescription drug industry's **Commission on Drug Safety**. This Commission was established, July 28, by the Pharmaceutical Manufacturers Association in an attempt to broaden scientific knowledge regarding predictability of action in humans of the potent drugs likely to emerge in the future. Dr. Coggeshall is Past President of the American Association of Medical Colleges and the American Cancer Society.

Of the 13 medical scientists appointed to the Commission two are from Washington, D. C.; Dr. Hugh H. Hussey, Dean and Professor of Medicine at Georgetown University School of Medicine, and Chairman of the AMA's Board of Trustees, and Dr. Austin Smith, President of the Pharmaceutical Manufacturers Association, formerly Editor of the *Journal of the AMA*. Dr. Leonard A. Scheele, an Honorary member of the D. C. Medical Society, is another appointee to the Commission. Dr. Scheele was Surgeon General of the Public Health Service from 1948 to 1956 and is now Senior Vice President of Warner-Lambert Pharmaceutical Company at Morris Plains, N. J.

Formation of a new **Armed Forces Chapter of the American College of Obstetricians and Gynecologists** has been announced by Dr. Edward C. Hughes, of Syracuse, N. Y., President of the College. Chapter officers appointed temporarily by Dr. Hughes are: Captain Sidney L. Arje, MC, USN, Chairman; Colonel Edward A. Zimmerman, MC, USA, Vice Chairman; and Lt. Colonel Kenneth N. Morese, MC, USAF, Secretary-Treasurer. All are of Washington, D. C., and serve, respectively, as consultants in obstetrics-gynecology to the Navy, Army, and Air Force.

Organization of the new Chapter will be completed at its first meeting during the annual Armed Forces Seminar on Obstetrics and Gynecology at Great Lakes Naval Training Station Hospital, North Chicago, Ill., October 21–24, 1962.

In the past, ACOG Fellows currently in the Armed Forces were assigned to the District in which they were stationed. In the future, all Fellows in service will be transferred to the Armed Forces Chapter, which will function as a ninth District of the College. The chairman of the Armed Forces Chapter will become an auditor-member (without vote) of the College's Executive Board.

Inquiries about the new Chapter, or about the forthcoming Armed Forces Seminar on Obstetrics and Gynecology, may be addressed to the Chapter Secretary, Lt. Colonel Kenneth N. Morese, c/o Office of the Surgeon General of the Air Force, Washington 25, D. C.

Dr. Philip L. Calcagno has been appointed Professor of Pediatrics and Chairman of the Department of Pediatrics at Georgetown University School of Medicine, effective August 1. He succeeds Dr. Frederic G. Burke, who has been Professor of Pediatrics since 1950.

Dr. Calcagno, a graduate of the Georgetown University, Class of 1943, comes to Washington from Buffalo, New York, where he has served on the faculty of the University of Buffalo School of Medicine for the past several years as Assistant Professor of Pediatrics. He has engaged extensively in research, his principal interest being renal physiology and pathology in infancy and childhood.

A new publication of the American Medical Association, **"Current Medical Terminology 1963,"** is designed as a medical dictionary with an alphabetized listing of the preferred terms, cross references and a numerical index. It can be used independently as a terminology reference book or as a companion to the Standard Nomenclature of Diseases and Operations or the International Classification of Diseases.

For the first time significant diseases have been catalogued in dictionary form along with their synonyms, causes, symptoms, signs, possible complications, usual findings and tests. Much outdated terminology has been eliminated and the list of diseases and conditions cut to about 4,000. Each of the diseases has been given a code number, which can serve as a sort of shorthand for the physician and researcher.

The book is available from the AMA for $2.00. Dr. Burgess L. Gordon is Editor of the book, which is paper-bound and 345 pages in length.

The Metropolitan Heart Guild has donated a portable Vectorcardiograph to the Cardiology Department of the Washington Hospital Center. The presentation was made by Mrs. Bernard General to Dr. Thomas W. Mattingly, Chairman of the Department of Medicine and Acting Chairman of the sub-department of cardiology at the Center.

This machine will make it possible to make bedside tests of patients who are too ill to be moved to the laboratory. It applies a new technique to heart disease which enables the physician to have a three-dimensional picture of the electrocardiographic tracing from the heart. This new method for studying heart disease is being supported by funds from the Washington Heart Association, the National Institutes of Health, and private individuals and organizations. Dr. Stanley M. Silverberg is director of research in this technique.

The 1962 edition of the AMA Medical Health Film Library catalog, now available for distribution, contains information about 173 films for professional audiences and 82 films to be used by physicians in addressing lay groups such as PTA, church organizations, service clubs, etc. Copies may be obtained, without charge, by addressing the American Medical Association, Medical Motion Pictures and Television Section, Department of Scientific Assembly, 535 North Dearborn Street, Chicago 10, Ill.

Mr. Harry J. Anslinger, the first Commissioner of the U. S. Bureau of Narcotics, resigned, effective July 5. He has been succeeded by **Deputy Commissioner Henry L. Giordano,** a Presidential appointment. Mr. Anslinger has headed the Bureau since its formation in the Treasury Department in 1930. Mr. Giordano has been Deputy Commissioner since November, 1958 and has served in the Bureau since 1941.

Dr. David E. Price, who has served as Deputy Director of the National Institutes of Health since 1960, has been appointed **Deputy Surgeon General of the Public Health Service.** He succeeds **Dr. John D. Porterfield,** who has served in that capacity since 1957.

Dr. Stuart M. Sessoms has succeeded Dr. Price as Deputy Director of NIH. Until he assumed his new duties, August 1, Dr. Sessoms was Associate Director for Collaborative Research of the National Cancer Institute.

On June 29, the Honorable Ivan Nestingen, Under Secretary of Health, Education, and Welfare, acting for Secretary Abraham Ribicoff, presented the Distinguished Service Medal of the Public Health Service to Dr. Porterfield and to Dr. Theodore J. Bauer, Chief of the Bureau of State Services, both of whom retired from the Service on July 1.

Dr. Porterfield left Washington on June 30 to become State-wide Coördinator of Health and Medical Affairs of the University of California. In addition, in this capacity he will advise the President of the University concerning the development of proposed new medical schools, including San Diego, which, when completed, will be the third medical center of the University of California. Present centers are located at San Francisco and Los Angeles. Dr. Porterfield will be lecturer at the School of Public Health on the San Francisco campus.

Both Dr. Price and Dr. Porterfield are Associate members of the D. C. Medical Society.

Dr. Richmond S. Paine has been appointed to the staff of **Children's Hospital** as neurologist and Director of the Hospital's Birth Defects Center. Dr. Paine, a graduate of Harvard Medical School, received his pediatric and neurological training at the National Hospital for Nervous Diseases, Queen Square, London, and at Children's Hospital Medical Center in Boston, where he has been on the medical staff since 1952.

The Birth Defects Center was created at Children's under a grant from the National Capital Area Chapter of the National Foundation, and will be primarily for diagnosis and treatment. It will concentrate initially on three types of birth defects of the central nervous system, spina bifida, hydrocephalus and encephalocele.

Concurrently with his appointment at Children's Hospital, Dr. Paine was appointed Professor of Pediatric Neurology at George Washington University School of Medicine.

Dr. Robert J. Anderson has been named Chief of the **Bureau of State Services of the Public Health Service.** He was formerly Deputy Chief, which position has now been assumed by **Dr. Aaron W. Christensen.** Both appointments were effective July 1, following the retirement of Dr. Theodore J. Bauer, who has been Chief of the Bureau for the past two years.

Dr. Seymour Kety has returned to the National Institute of Mental Health in Bethesda, Md., as Chief of the Laboratory of Clinical Science. He was Chief of the Laboratory from 1956 until last year, when he accepted an appointment at Johns Hopkins University School of Medicine as Henry Phipps Professor and Chairman of the Department of Psychiatry. With the exception of the one year at

Johns Hopkins, Dr. Kety has been with NIH since 1951.

The Reverend Joseph F. Cohalan, S.J., has been appointed Vice President for Medical Center Affairs of Georgetown University. Associated with Georgetown for 22 years, he has been University Treasurer since 1951. He succeeds the Reverend William F. Maloney, S.J., who is now Rector of St. Joseph's College in Philadelphia.

The editorial office of *The Journal of Medical Education* has been moved to the headquarters office of the Association of American Medical Colleges, 2530 Ridge Avenue, Evanston, Ill. The offices were located in Madison, Wisconsin, for the past four years.

Dr. John A. D. Cooper, Professor of Biochemistry and Associate Dean of Northwestern University Medical School, has been named Editor of *The Journal*, succeeding Dr. John Z. Bowers, Professor of Medicine at the University of Wisconsin. Dr. Bowers has been Editor of *The Journal* since 1957.

Personals

Dr. Josephine J. Buchanan, formerly Chief of the Department of Physical Medicine and Rehabilitation at D. C. General Hospital, has been named Physician of the Year 1961 by the President's Committee on Employment of the Handicapped. She has received many awards for her outstanding work at D. C. General in developing its work therapy program, and this is the newest recognition.

The Award, which will be an illuminated scroll inscribed over the signature of the President of the United States, will be presented to her by Major General Melvin J. Maas, USMCR (Ret.), Chairman of the President's Committee, at the AMA's Congress on Occupational Health, to be held in Boston, October 3.

Dr. Buchanan came to D. C. General Hospital in 1950 to set up its rehabilitation program. She has been in private practice since January 1961.

DR. GOLDMAN—PAINTER AND SCULPTOR

Dr. Milton L. Goldman, Washington surgeon, has been receiving high awards consistently during the past serveral years at the Art Exhibit sponsored annually by the American Physicians' Art Association held in conjunction with the AMA Conventions. This year, at the exhibit held in Chicago in June, he received Second Award in Sculptures for his "Seated Figure," shown here, as well as a First Award in water colors and another Second Award in oils.

Children's Hospital announces the appointment of **Dr. Joseph M. LoPresti** as Chief Radiologist, effective July 1. He succeeds **Dr. Isidore Lattman,** who has been Chairman of the Department of Radiology since 1938. Dr. Lattman has been promoted to the Senior Advisory Staff and will continue in the Department of Radiology as Chairman Emeritus.

Dr. LoPresti graduated from the Georgetown University School of Medicine. He served his pediatric residency at Children's Hospital and has been Associate Radiologist at Children's since 1955. In addition, he was also Director of Medical Education at the Hospital from 1954 to 1959, when he went to the National Institutes of Health for a three-year residency in radiology. Dr. LoPresti is on the faculty of Georgetown University as Clinical Associate Professor of Pediatrics.

Another announcement from Children's Hospital is the appointment, as of July 1, of **Dr. Wellington Hung** as Chief Endocrinologist.

Dr. Hung received his medical degree from George Washington University in 1957 and served his pediatric residency at Children's Hospital from 1958 to 1960. During the past two years he has had a fellowship with the Division of Pediatric Endocrinology at Johns Hopkins University School of Medicine. Dr. Hung has also been appointed to the academic staff of Children's, and elected to membership on the Hospital's Associate Staff. He is an Associate member of the D. C. Medical Society.

Major Raymond Scalettar, Washington internist, was recently awarded the Certificate of Achievement by Walter Reed General Hospital, where he had served for more than six years. Formerly chief of Walter Reed's Arthritis Clinic and of two of its General Medical sections, he was cited for his "outstanding ability as a clinician, teacher and supervisor" and for "materially assisting the training program as an instructor for students, interns and residents assigned to him."

Dr. Scalettar is Clinical Instructor of Medicine at Georgetown University School of Medicine and is associated with the Arthritis Clinic at the Washington Hospital Center.

In memory of **Dr. Roscoe W. Hall,** a group of his friends gave to St. Elizabeths Hospital, July 3, a handsome, electrified globe of the world. It was presented to the Hospital by Dr. Zigmond M. Lebensohn and accepted by Dr. Winfred Overholser, Superintendent. The inscription on the wooden base which holds the globe describes the deceased as "Psychiatrist—Teacher—Good Companion; Acting Superintendent, Saint Elizabeths Hospital, March–October 1937." He was Clinical Director of St. Elizabeths Hospital for more than 25 years.

Dr. Hall died December 25, 1961, but expressed the wish that no service or ceremony be allowed at the time of his death. A dinner meeting was held in his honor on February 22, 1962, and this date is used on the memento. It will be placed permanently in the new library wing.

Dr. Charles D. Shields, Chairman of the Department of Physical Medicine and Rehabilitation, Georgetown University School of Medicine, has been appointed Chairman of the newly formed Advisory Council to the Physical Medicine and Rehabilitation Service of the Veterans Administration Department of Medicine and Surgery. The Council consists of six nationally known specialists in physical medicine and rehabilitation.

Dr. Sanford L. Billet has been appointed Chief of the D. C. Bureau of Mental Health. He is also Acting Chief of the Alcoholic Rehabilitation Division.

Dr. Billet is an alumnus of the Cincinnati College of Medicine and is a diplomate in psychiatry of the American Board of Psychiatry and Neurology. He became Chief of the Alcoholic Rehabilitation Division a year ago.

Dr. Thomas W. Mattingly was reëlected Governor for the District of Columbia at the Annual Meeting of the American College of Chest Physicians in Chicago, June 21–25.

At the Annual Meeting of the Joint Blood Council, Inc., in Chicago, June 29, **Dr. Frank E. Wilson** was reëlected Executive Vice President and Secretary. **Dr. Oscar B. Hunter, Jr.,** was elected Treasurer.

Dr. James T. Estes was certified by the American Board of Surgery on May 25, 1962.

Obituaries

CHARLES ROBERT LEE HALLEY, A.B., M.D., F.A.C.P.

(1896–1962)

Dr. Charles R. L. Halley, Emeritus Professor of Clinical Medicine at George Washington University, died July 15, 1962, at the University Hospital. His offices were at 915 19th Street, N.W.; his home at 18 East Bradley Lane, Chevy Chase, Md.

Dr. Halley was born in Mexico, Missouri, May 8, 1896, to Dr. Charles Robert Lee Halley, Sr., and Laura Craddock Halley. He attended the public schools of Sheridan, Wyoming. He graduated with a Bachelor of Arts degree from the University of Missouri in 1918, and in 1922 received his medical degree from Johns Hopkins University. He interned at Johns Hopkins Hospital the following year and at the Union Memorial Hospital, Baltimore, in 1923–24. For resident training he spent a year at Colorado General Hospital in Denver.

He was full-time Instructor in Medicine at Johns Hopkins University from 1926 to 1927, when he came to Washington to practice and to serve on the teaching staff of George Washington University. In 1938 he was appointed Clinical Professor of Medicine, and he was given Emeritus status in 1961.

Dr. Halley, a specialist in internal medicine, was certified by the American Board of Internal Medicine. He was on the staff of George Washington University Hospital and on the staff of Emergency Hospital until 1946. From 1942 to 1950 he was Chief of the Medical Staff of Suburban Hospital in Bethesda, Md., and continued on the consulting staff. He had been consultant to St. Elizabeths Hospital since 1940, to Montgomery County (Maryland) General Hospital from 1934 to 1957, when he became Chief of Medical Service, and Attending Internist at Chestnut Lodge Sanitarium, 1932 to 1948.

He was on the Board of Directors of the Montgomery County Tuberculosis Association from 1940 to 1950. He contributed frequently to medical and other scientific publications.

Dr. Halley was a Fellow of the American College of Physicians and an Active member of the Medical Society of the District of Columbia since 1928. He was a member of many other scientific organizations, including the American Medical Association, the American Society of Internal Medicine, the American and Washington Heart Associations, American Federation for Clinical Research, Johns Hopkins Medical and Surgical Society, Washington Academy of Medicine, George Washington University Medical Association, and an affiliate member of the Montgomery County (Maryland) Medical Society.

He was a member of Phi Beta Kappa honorary society, the Cosmos Club, and the Society of Colonial Wars, having served as Governor of the latter in 1951 and 1952.

He leaves his wife, Mrs. Adelaide B. Halley; two daughters, Mrs. Charles W. Nicolson, of Westmoreland Hills, Md., and Mrs. Richard P. Dowell, of the Air Force Academy, Colorado Springs, Colo.; and two stepsons, Captain B. Satterthwaite, stationed with the U. S. Army in Korea, and Henry B. Satterthwaite, of the home address.

BERNARD LIPSCOMB JARMAN, M.D.

(1889–1962)

Dr. Bernard L. Jarman, pioneer flight surgeon, died suddenly, July 15, 1962, at the Army-Navy Club. His offices were at 1028 Connecticut Avenue, N.W., and his home at 4929 Tilden Street, N.W.

Dr. Jarman was born in Charlottesville, Va., on May 29, 1889, to James E. and Mary E. Jarman. He attended schools in Charlottesville and graduated from the University of Virginia School of Medicine in 1915. He interned at Ancon Hospital in the Canal Zone, Panama, and at the Touro Infirmary in New Orleans.

He entered the U. S. Army Medical Corps in 1917 and served overseas during World War I as surgeon for the 313th Machine Gun Battalion of the 80th Division. He was discharged as Captain in 1922.

After World War I he took postgraduate training in otolaryngology at Episcopal Eye, Ear and Throat Hospital, Washington, and was later certified by the American Board of Otolaryngology. He also did postgraduate work at the Army Medical School in

Washington and at the Flight Surgeons School at Mitchel Field, Long Island, N. Y.

During World War II he served as Flight Surgeon at Bolling Field. He retired with the rank of Colonel in 1949.

He was a charter member of the Aero-Medical Association, now known as the Aerospace Medical Association, and was its President in 1937–38. He was a charter member of the Washington Air Derby. He had been an Active member of the D. C. Medical Society since 1925. He also belonged to the Army-Navy Club and to the First Methodist Church in Charlottesville, Va.

His wife, Mrs. Rosa Pollio Jarman, died in 1959. He leaves a brother, Zack L. Jarman, of Charlottesville, and two sisters, Mrs. William H. Faulconer, of Charlottesville, and Mrs. Robert A. Rhodes, of Richmond, Va.

Cardiac Tamponade due to Pericardial Effusion—Adkins and Kelser

(*Continued from page 505*)

REFERENCES

1. Stauffer, H. M., Soloff, L. A., Zatuchni, J., and Carter, B. L.: Gas and opaque contrast in roentgenographic diagnosis of pericardial disease. J.A.M.A., 1960, **172**, 1122.
2. Bishop, L. H., Jr., Estes, E. H., Jr., and McIntosh, H. D.: Electrocardiogram as safeguard in pericardiocentesis. Ibid., 1956, **162**, 264.
3. Neill, J. R., Hurst, J. W., and Penfold, E. L. J.: Pericardiocentesis electrode. New Engl. J. Med., 1961, **264**, 711.
4. Bergmann, M., and Charnas, R. M.: Acute staphylococcal pericarditis. Successful treatment by parietal pericardiectomy. AMA Arch. Surg., 1960, **81**, 903.
5. Mannix, E. P., Jr., and Dennis, C.: Surgical treatment of chronic pericardial effusion and cardiac tamponade. J. Thoracic Surg., 1955, **29**, 381.
6. Holman, E., and Willett, F.: Treatment of active tuberculous pericarditis by pericardiectomy. J.A.M.A., 1951, **146**, 1.

Perforation of Cancers of Colon—Thistlethwaite and Cornwell

(*Continued from page 524*)

Summary

A group of patients with perforated carcinomas of the colon has been presented and their treatment discussed.

Most perforations occur at the site of the growth in the bowel and give rise to either a localized abscess or massive peritonitis.

In a few instances perforation of the bowel occurs proximally as a diastatic perforation in the cecum. Such perforations usually cause extensive peritoneal soilage.

Perforated carcinomas of the ascending colon are treated by resection and transverse ileocolostomy.

Perforated lesions of the descending colon can be treated by either exteriorization resection or proximal colostomy with secondary resection of the lesion. Whenever technically feasible, our preference is a wide resection with exteriorization as the initial procedure.

Diastatic perforations of the cecum are treated by exteriorization of the cecum with tube cecostomy. Resection of the obstructing lesion in the colon is performed at a later date.

REFERENCES

1. Cawkwell, W. I.: Acute perforation with peritonitis as a complication of carcinoma of the colon. New Zeal. Med. J., 1955, **54**, 187.
2. Mershiemer, W. L., and Miller, E. M.: Diffuse peritonitis, secondary to intestinal perforation complicating malignant lesions of the colon. Surg. Gynec. Obstet., 1954, **99**, 436.
3. Goligher, J. C., and Smiddy, F. G.: Treatment of acute obstruction or perforation with carcinoma of colon and rectum. Brit. J. Surg., 1957, **45**, 270.
4. Ravid, J. M.: Diastasis and diastatic perforation of gastrointestinal tract; clinical, pathological and experimental study. Amer. J. Path., 1951, **27**, 33.
5. Wangensteen, O. H.: Intestinal Obstructions, 3rd ed. Springfield, Ill.: Thomas, 1955.
6. Pizzagalli, G. F., and Viviani, C.: Perforation of sigmoid as first sign of neoplasm. Ospedale Maggicre, 1958, **46**, 509.

in 1948
unique therapeutic achievement

in 1962
universal therapeutic acceptance

Dramamine® in vertigo

brand of dimenhydrinate

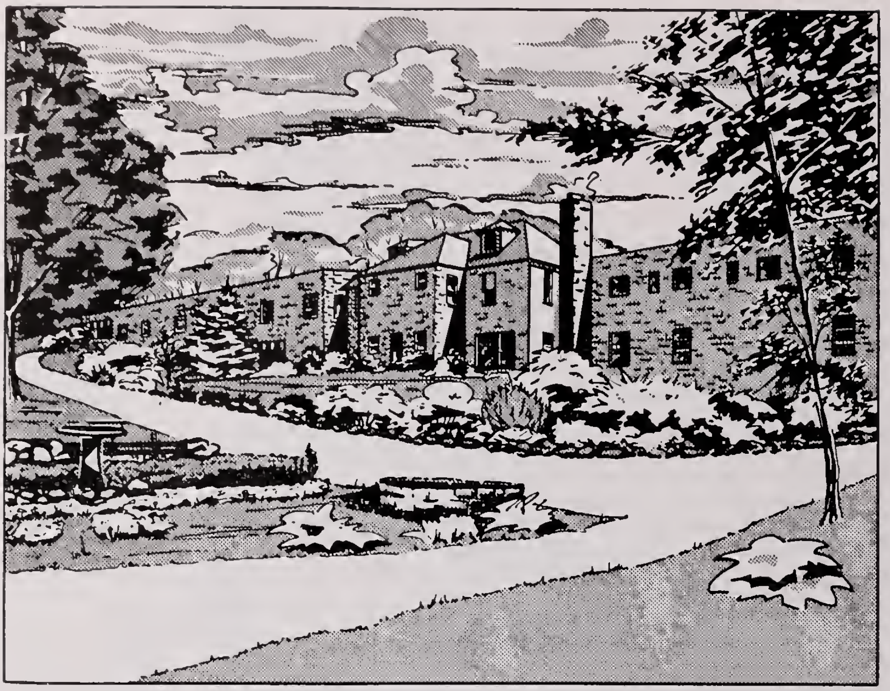
world standard for control of vertigo, nausea and emesis associated with

■ Motion Sickness ■ Postoperative States ■ Labyrinthitis ■ Hypertension ■ Radiation Sickness ■ Ménière's Syndrome ■ Postfenestration Syndrome ■ Antibiotic Therapy ■ Migraine Headache ■ Pregnancy ■ Narcotization ■ Electroshock Therapy

Tablets/Liquid/Ampuls (for I. M. or I. V. use)/Supposicones®

SEARLE

Research in the Service of Medicine



"All the Comforts of Home" . . .

for

POST OPERATIVE
•
MEDICAL
•
CONVALESCENT
•
DIABETIC
•
PARALYTIC
•
INVALID
•
AGED
•
CHRONIC
•
AMBULATORY
•
RETIRED GUESTS, ETC.

★ A MEDICAL INSTITUTION UNDER THE SUPERVISION OF REGISTERED NURSES ★
LICENSED BY STATE AND COUNTY

KENSINGTON GARDENS SANITARIUM

AN ULTRA-MODERN HOME IN THE SUBURBS ON TEN ACRES
WITH A COUNTRY ATMOSPHERE

3000 McComas Avenue Kensington, Maryland

MEMBER OF

NATIONAL GERIATRICS SOCIETY
CARE OF THE AGED

AMERICAN NURSING HOME ASSOCIATION

MEMBER
AND MARYLAND NURSING HOME ASSOCIATION

- Rehabilitation Facilities
- Private and Semi-Private Rooms with Connecting Baths
- Beautifully Decorated
- Television in Spacious Lounges
- Large Porches
- Lovely Lawns and Shade Trees
- Supervised Diets
- Patients May Retain Their Own Physician
- 24-Hour Nursing Care
- Reasonable Rates
- Recreation and Physical Therapy

For Further Information Phone

LOckwood 5-2291 or LOckwood 5-0872

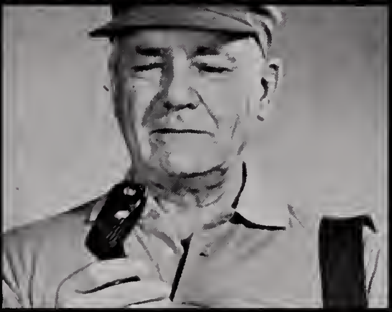
Proprietors-Administrators

LILLIAN H. and GEORGE L. BRICKER

Schering

Naqua brand of trichlormethiazide to help them live with their hypertension

Good start on the day's work (sleep is restful, morning headache gone)



Golf today, fishing tomorrow (retired but not easily tired)

Housework in a.m., shopping in p.m. (B.P. down, dizzy spells relieved)

Gardening is enjoyable again (edema gone, spirits up)

often the only therapy needed to control blood pressure and relieve symptoms in mild or moderate cases*

NAQUA potentiates other antihypertensives when used adjunctively.... Side effects are minimal.... Economically priced.

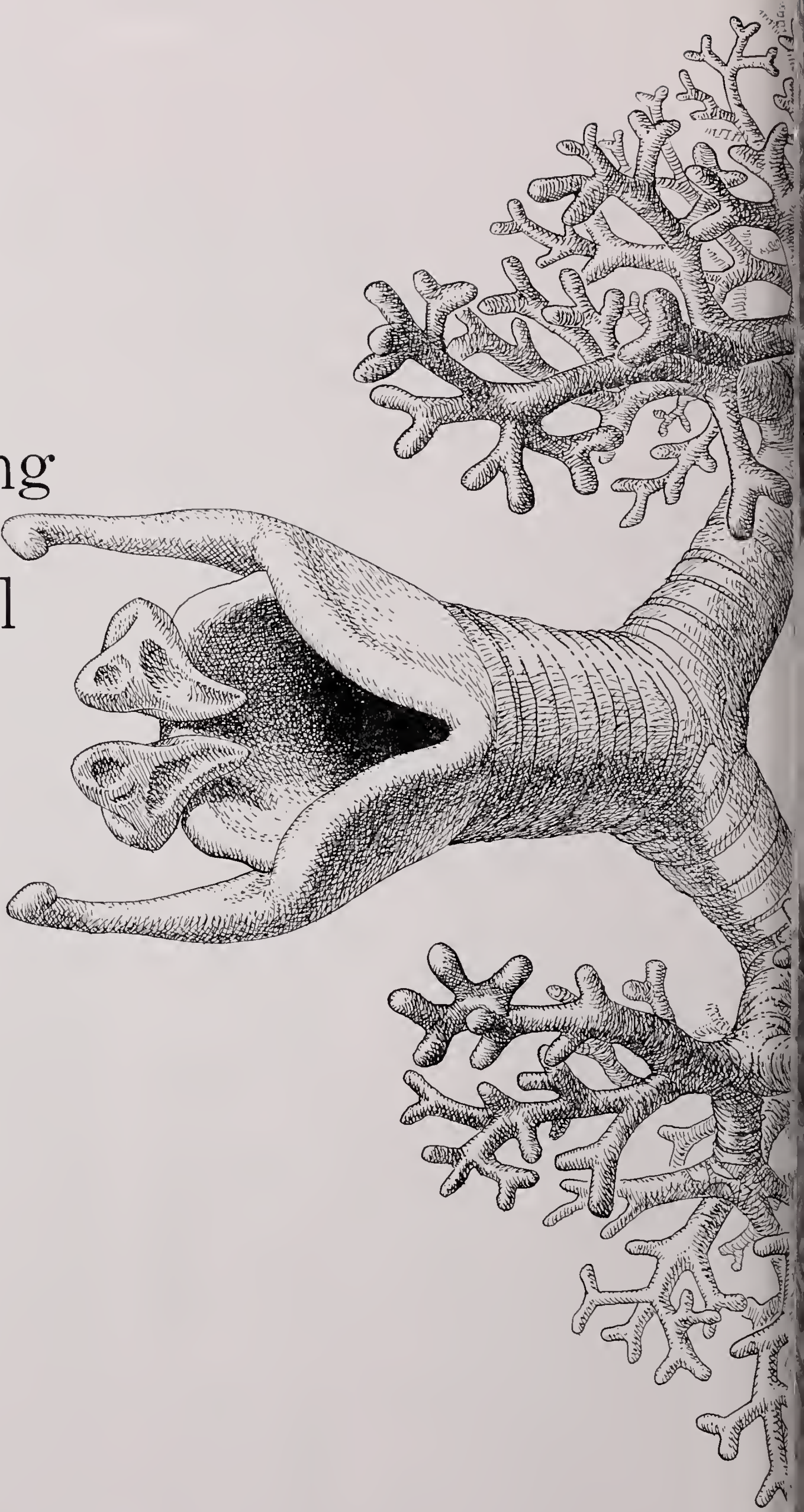
Packaging: NAQUA Tablets, 2 or 4 mg., scored, bottles of 100 and 1000.

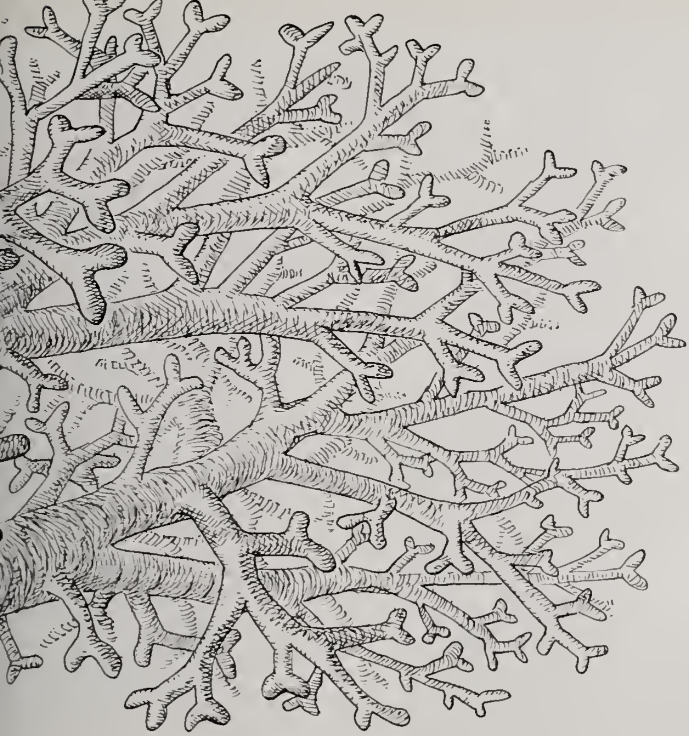
For complete details, consult latest Schering literature available from your Schering Representative or Medical Services Department, Schering Corporation, Bloomfield, New Jersey.

*Schaefer, L. E.: Clin. Med. 8:1343, 1961.

S-963

gratifying
relief
in bronchial
asthma





unsurpassed for total patient benefits

Aristocort®

Triamcinolone Lederle

With ARISTOCORT, asthmatic patients obtain sustained relief of wheezing, dyspnea, and spasmodic coughing. It is of particular value in ameliorating severe attacks that may have serious sequelae. With ARISTOCORT, many patients who might otherwise be invalids are able to continue their customary livelihoods or maintain their regular household activities. Yet this symptomatic relief is not often accompanied by the hormonal collateral effects—sodium retention, edema, emotional disturbance, insomnia, voracious appetite—that so often have been a deterrent to steroid therapy.

SUPPLIED Scored tablets (three strengths), syrup and parenteral. Request complete information on indications, dosage, precautions and contraindications from your Lederle representative, or write to Medical Advisory Department.

Lederle

LEDERLE LABORATORIES
A Division of
American Cyanamid Company
Pearl River, New York

PERCODAN BRINGS *SPEED*...DURATION...
AND DEPTH TO ORAL ANALGESIA

in the wide middle region of pain

PERCODAN®

(Salts of Dihydrohydroxycodeinone and Homatropine, plus APC) TABLETS

fills the gap between mild oral and potent parenteral analgesics

■ acts in 5-15 minutes ■ relief usually lasts 6 hours or longer ■ constipation rare ■ sleep uninterrupted by pain

Literature on request

Endo®
ENDO LABORATORIES
Richmond Hill 18, New York

Average Adult Dose: 1 tablet every 6 hours. May be habit-forming. Federal law allows oral prescription. *Also Available:* Percodan®-Demi: the complete Percodan formula, but with only half the amount of salts of dihydrohydroxycodeinone and homatropine.

Each scored, yellow Percodan* Tablet contains 4.50 mg. dihydrohydroxycodeinone HCl, 0.38 mg. dihydrohydroxycodeinone terephthalate (warning: may be habit-forming), 0.38 mg. homatropine terephthalate, 224 mg. acetylsalicylic acid, 160 mg. acetophenetidin, and 32 mg. caffeine.

*U.S. Pats. 2,628,185 and 2,907,768

Relieves
Anxiety
and
Anxious
Depression

The outstanding effectiveness and safety with which Miltown relieves anxiety and anxious depression—the type of depression in which either tension or nervousness or insomnia is a prominent symptom — has been clinically authenticated time and again during the past six years. This, undoubtedly, is one reason why physicians still prescribe meprobamate more often than any other tranquilizer in the world.

Clinically proven
in over 750
published studies

1 Acts dependably — without causing ataxia or altering sexual function

2 Does not produce Parkinson-like symptoms, liver damage or agranulocytosis

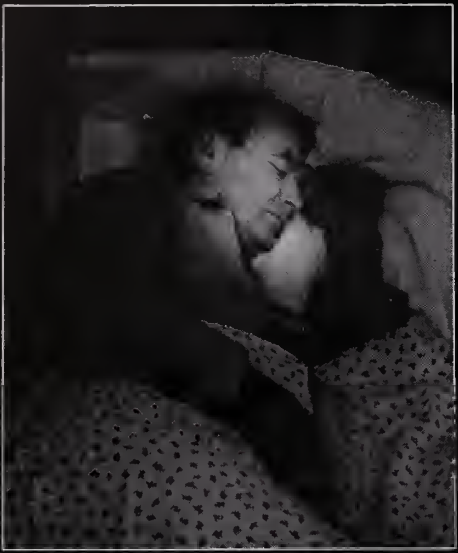
3 Does not muddle the mind or affect normal behavior

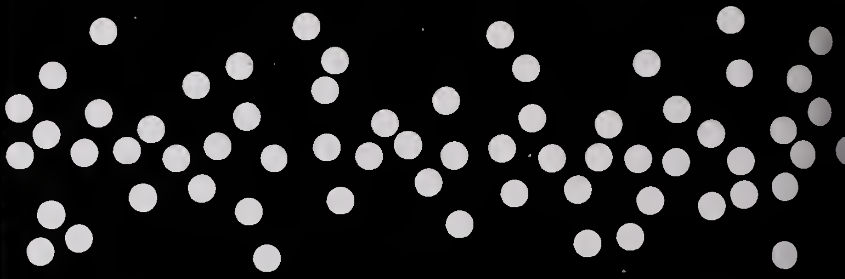
Miltown®
meprobamate (Wallace)

Usual dosage: One or two 400 mg. tablets t.i.d.
Supplied: 400 mg. scored tablets, 200 mg. sugar-coated tablets; bottles of 50. Also as MEPROTABS® — 400 mg. unmarked, coated tablets; and in sustained-release capsules as MEPROSPAN®-400 and MEPROSPAN®-200 (containing respectively 400 mg. and 200 mg. meprobamate).

WALLACE LABORATORIES / *Cranbury, N. J.*

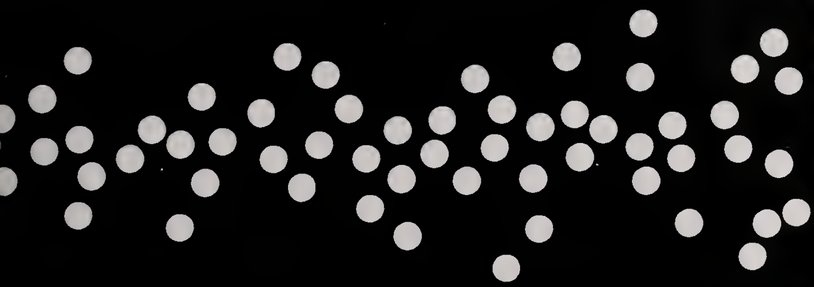
CM-6702

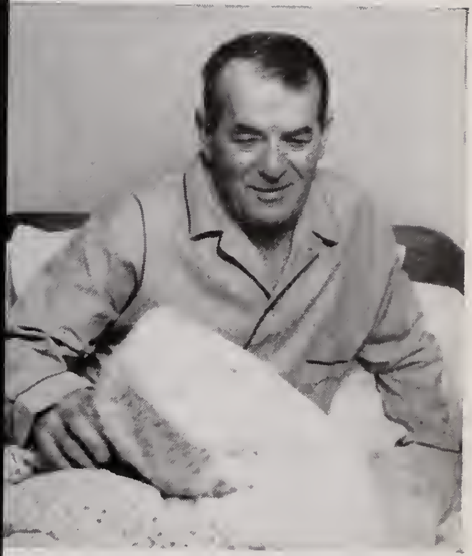




Thanks to 135 tiny "doses" throughout th

*Trademark, Reg. U.S. Pat.Off. Copyright 1962, The Upjohn Company





ght, the arthritic wakes up comfortable

Morning stiffness may be reduced or even eliminated as a result of therapy with the only steroid in long-acting form. And the slow, steady release of steroid makes it possible in some cases to reduce the frequency of administration and/or the total daily steroid dosage.

Medrol* Medules*

Each hard-filled capsule contains Medrol (methylprednisolone) 4 mg. Also available in 2 mg. soft elastic capsules.

Supplied in bottles of 30 and 100.

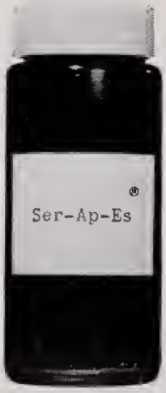
Reminder advertisement.
Please see package insert for
detailed product information.

Upjohn

The Upjohn Company, Kalamazoo, Michigan

Combination
A
Combination
B
Combination
C

These leading antihypertensive combinations are practically all alike.



This one is different...

because Ser-Ap-Es offers a unique benefit which makes blood pressure control more certain: the central and peripheral antihypertensive actions of Apresoline. By adding Apresoline to the regimens of their patients, Dupler *et al*[1] succeeded in bringing blood pressure down after rauwolfia-diuretic therapy failed. Using Ser-Ap-Es, Hobbs[2] reduced average blood pressure from 175/100 mm. Hg to 148/85 mm. Hg in 74 hypertensive patients. Side effects? Rarely a problem with Ser-Ap-Es because effective dosage is low.

SUPPLIED: SER-AP-ES Tablets, each containing 0.1 mg. SERPASIL® (reserpine CIBA), 25 mg. APRESOLINE® hydrochloride (hydralazine hydrochloride CIBA), and 15 mg. ESIDRIX® (hydrochlorothiazide CIBA). For complete information about Ser-Ap-Es (including dosage, cautions, and side effects), see current Physicians' Desk Reference or write CIBA.

1. Dupler, D.A., Greenwood, R.J., and Connell, J.T.: J.A.M.A. 174:123 (Sept. 10) 1960.
2. Hobbs, L.F.: To be published. 2/3026MB

CIBA
SUMMIT, N.J.

RELIEVE THE COLD
SUPPRESS THE COUGH
WITH NEW
'EMPRAZIL-C'
TABLETS
ANTITUSSIVE ▪ DECONGESTANT ▪ ANALGESIC

Each tablet contains:

Codeine Phosphate*	15 mg.
'Sudafed'® brand Pseudoephedrine Hydrochloride	20 mg.
'Perazil'® brand Chlorcyclizine Hydrochloride	15 mg.
Acetophenetidin	150 mg.
Aspirin (Acetylsalicylic Acid)	200 mg.
Caffeine	30 mg.

*Warning—may be habit forming.

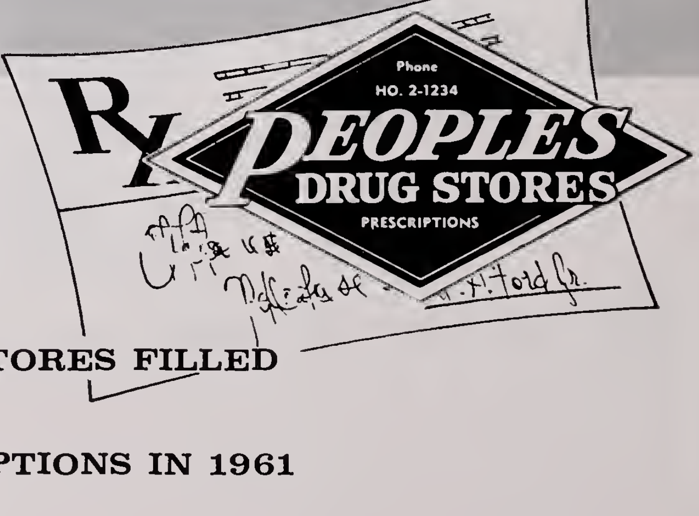
Complete literature available on request.

Also available without codeine as
'EMPRAZIL'®
TABLETS

BURROUGHS WELLCOME & CO. (U.S.A.) INC., TUCKAHOE, N.Y.

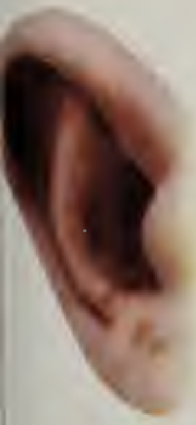
every
7
seconds
60
5

Peoples Drug Stores
Filled A Prescription
In 1961!


Rx
Phone
HO. 2-1234
PEOPLES
DRUG STORES
PRESCRIPTIONS

PEOPLES DRUG STORES FILLED

4,424,474 PRESCRIPTIONS IN 1961



"opened
nose
clear to the ears"[1]

This was how one patient described the nasal decongestant action of Dimetapp Extentabs. How would *your* patients describe it? From the first tablet, Dimetapp Extentabs provide prompt and prolonged relief from the stuffiness, drip and congestion of upper respiratory conditions, with exceptional freedom from side effects. The reason is in the formula: the potent antihistamine with side effects as few as placebo,[2] DIMETANE® (brompheniramine maleate, 12 mg.) and two outstanding decongestants, phenylephrine HCl (15 mg.) and phenylpropanolamine HCl (15 mg.)... all in dependable, long-acting Extentab form.

NEW DIMETAPP ELIXIR (one-third the Dimetapp Extentabs' formula in each 5 cc.), for conventional t.i.d. or q.i.d. dosage in a palatable, grape-flavored vehicle.

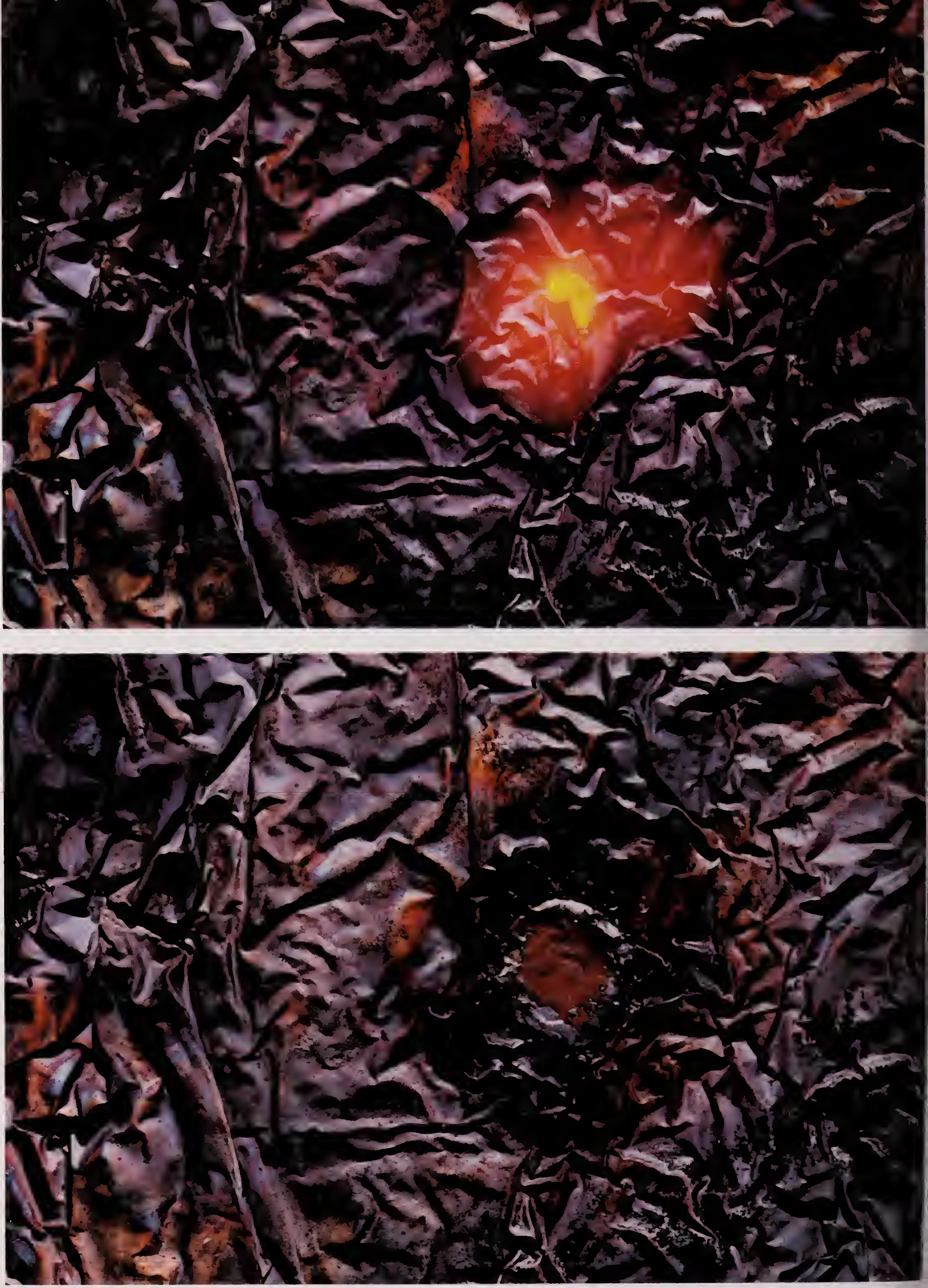
References: 1. Clinical report on file, Medical Department, A. H. Robins Co., Inc. 2. Schiller, I. W., & Lowell, F. C.: New England J. Med. *261*:478, 1959.

for nasal decongestion **Dimetapp® Extentabs®**

in sinusitis, colds, u.r.i., up to 10-12 hours' clear breathing on one tablet

PHARMACEUTICALS RESEARCH

A. H. ROBINS CO., INC., RICHMOND 20, VA.



The illustration: To dramatize the pain and trauma and healing of the peptic ulcer, our photographer burned a "lesion" into crumpled metal with a blowtorch and photographed it, then repaired the damage and rephotographed the result — the "healed" ulcer.

ulcer under repair

"What results can I expect in my ulcer patients?" Shown below is a tabulation of 795 ulcer patients, reported by 69 investigating physicians, in which glycopyrrolate was the anticholinergic employed. They represent a cross section of ulcer patients of all ages, both ambulatory and hospitalized, under various regimens, from all sections of the country.

Note the pattern of results. Robinul showed an "excellent" or "good" response in over 83% of patients, and Robinul-PH provided similar results in 81%.

As for side effects, these often troublesome extensions of anticholinergic action such as dry mouth, blurred vision, etc., were evaluated as "moderate-to-severe" in only 6.7% of a total of 1705 patients in preliminary investigative studies, 795 of whom are the ulcer cases tabulated here.

We invite you to try Robinul in your own practice. We believe you will find it one of the most effective agents you have ever used for the management of the ulcer patient.

Robinul® (formerly Robanul)
Each tablet contains glycopyrrolate, 1.0 mg.

Robinul®-PH (formerly Robanul-PH)
Each tablet contains glycopyrrolate, 1.0 mg.;
and phenobarbital (¼ gr.), 16.2 mg.

Robinul® at work

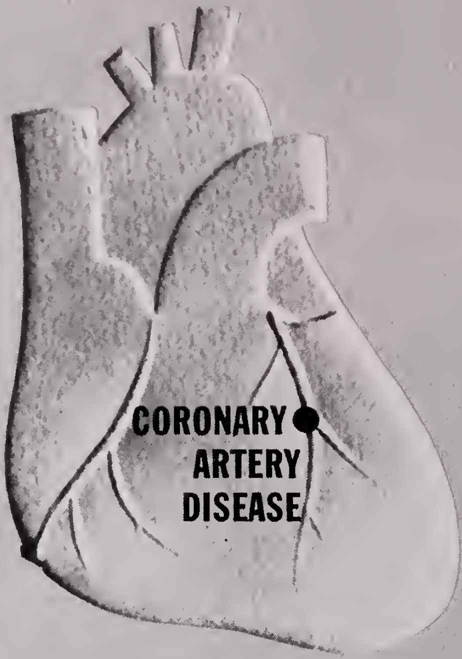
Brand of glycopyrrolate, Robins

results with Robinul and Robinul-PH in 795 ulcer patients, from 69 clinical investigators*

DIAGNOSIS	ROBINUL					ROBINUL-PH				
	*No. Patients	Excellent	Good	Fair	Poor	*No. Patients	Excellent	Good	Fair	Poor
Marginal Ulcer	11	3	3	3	2	1	0	1	0	0
Pyloric Channel Ulcer	6	3	1	0	2	2	1	1	0	0
Pyloric Ulcer	4	2	1	1	0	1	1	0	0	0
Gastric Ulcer, bleeding	3	1	2	0	0					
Gastric Ulcer	48	31	11	1	5	12	5	7	0	0
Gastric Ulcer, penetrated	1	0	1	0	0	1	1	0	0	0
Gastric Ulcers, multiple	1	1	0	0	0					
Duodenal Ulcer	494	220	195	48	31	99	41	38	13	7
Duodenal Ulcer, bleeding	38	19	15	3	1	2	1	0	1	0
Duodenal Ulcer, obstruction	13	4	3	1	5					
Duodenal Ulcer, perforated	5	2	1	0	2	6	0	3	1	2
Gastric and Duodenal Ulcer	4	2	2	0	0					
Peptic Ulcer, unspecified	25	19	4	0	2	18	8	7	2	1
TOTALS	653	307	239	57	50	142	58	57	17	10
		83.6%					81.0%			

*Clinical reports on file, A. H. Robins Company, Inc.

A. H. Robins Co., Inc.
Richmond 20, Virginia



● "...now the leading cause of death in diabetic patients."[1]

Diseases of the cardiovascular-renal system account for about three-fourths of deaths among diabetic patients, with heart disease responsible for approximately one-half the total,[2,3] and coronary atherosclerosis the major cause of cardiac lesions.[1] While some feel that diabetics are predisposed, perhaps by heredity, to early onset of vascular disease, considered opinion is that vascular degeneration can be delayed or modified with "... careful and consistent control of diabetes from the time of diagnosis...."[4]

As a major step toward achieving *careful and consistent control,* you can teach your patients to do urine-sugar testing in the way most likely to assure continued cooperation—with the CLINITEST® Urine-Sugar Analysis Set.

for quantitative estimation

color-calibrated

clinitest®
urine sugar

- continued, close control
- graphic *Analysis Record* encourages cooperation...reveals degree of control at a glance...helps patient maintain control

for "yes-or-no" enzymatic testing

new, improved

DIP AND READ **clinistix®**
urine glucose

10-second reading...longer strip for easier handling...new color chart and color barrier for test area...in glass for protection

Supplied: CLINITEST Urine-Sugar Analysis Set (with bottle of 36 tablets and 2 foil-wrapped tablets); refill boxes of 24 Sealed-in-Foil Reagent Tablets and bottles of 36 tablets. CLINISTIX Reagent Strips in bottles of 60.

References: (1) Root, H. F., and Bradley, R. F., in Joslin, E. P.; Root, H. F.; White, P., and Marble, A.: The Treatment of Diabetes Mellitus, ed. 10, Philadelphia, Lea & Febiger, 1959, pp. 411, 437. (2) Joslin, E. P.; Root, H. F.; White, P., and Marble, A.: *ibid.*, pp. 188-189. (3) Marks, H. H., *et al.:* Diabetes *9*:500, 1960. (4) Marble, A., in Summary of Conference on Diabetic Retinopathy, Survey Ophth. (Part 2) *6*:611-612, 1961.

AMES
COMPANY, INC
Elkhart • Indiana
Toronto • Canada

AMES *products are available through your regular supplier.*

21462

THIS IS THE
COLOR OF
PROTECTION

BETADINE—The only germicide whose color indicates a germ-free environment—provides lasting protection and is the most potent non-irritating topical antiseptic known.

**for the first time...
a universal microbicidal agent
that does not sensitize
or retard healing**

Betadine®

Povidone-Iodine NND

Kills bacteria, viruses, fungi, yeasts and protozoa on contact. Non-injurious to skin, exposed tissue or mucous membranes.

Products available: Betadine Solution • Betadine Aerosol Spray • Betadine Vaginal Douche • Betadine Vaginal Gel • Betadine Shampoo • Betadine Ointment • Betadine Swab Aids • Betadine Surgical Scrub •

TAILBY NASON COMPANY, INC.
Dover, Delaware Established 1905

In the Southeastern States Distributed by
PHYSICIANS PRODUCTS CO., INC.
Petersburg, Va. Literature on request

WITH YOUR ENCOURAGEMENT

AND

DEXEDRINE®

brand of dextro amphetamine

SPANSULE®

brand of sustained release capsules

she's losing weight

'Dexedrine' *Spansule* capsules not only control appetite all day long, but at the same time encourage normal activity. This is particularly important because overweight patients are often inactive. In such patients 'Dexedrine' overcomes lethargy, helps renew their interest in doing things—not just eating.

PRESCRIBING INFORMATION

INDICATIONS AND DOSAGE: For the following indications, the recommended daily dosage is one or two 'Dexedrine' *Spansule* capsules, usually taken in the morning: control of appetite in weight reduction; depressive states; alcoholism. In narcolepsy, the recommended daily dosage is up to 50 mg. of 'Dexedrine' by 'Spansule' capsule on arising.

SIDE EFFECTS: Insomnia, excitability and increased motor activity are infrequent and ordinarily mild.

CAUTIONS: Should be used with caution in patients hypersensitive to sympathomimetic compounds; in cases of coronary or cardiovascular disease; and in the presence of severe hypertension.

CONTRAINDICATIONS: Hyperexcitability; agitated pre-psychotic states.

SUPPLIED: 5 mg., 10 mg. and 15 mg., in bottles of 30. (Each capsule contains dextro amphetamine sulfate, 5 mg., 10 mg., or 15 mg.)

Prescribing information adopted January 1961.

Smith Kline & French SK&F *Laboratories*

ESTABLISHED 1873

WOMEN ASSISTANTS

In Washington and Suburbs

CALL COLUMBIA 5-7023
(*Six Trunk Lines*)

The S.H.Hines Company

Funeral Home

2901-03-05-07 FOURTEENTH STREET N.W.
Northeast corner Harvard and 14th Streets

W. R. FRANK HINES
President and General Manager

MODERN AIR-CONDITIONED ROOMS WITH CHAPEL, PIPE ORGAN AND REPOSING ROOMS ARRANGED TO MEET EVERY REQUIREMENT AT NO ADDITIONAL CHARGE. CREMATIONS.

No forfeiture of VETERAN'S BURIAL ALLOWANCE
THE EXPENSE IS A MATTER OF YOUR OWN DESIRE

No Branch Establishments
Convenient parking facilities adjoining Funeral Home

Eugene F. Roesser, C.L.U.

—Since 1949 dedicated to helping physicians and their families attain a better life through high quality, well planned insurance and investment programs.

1130 Seventeenth Street, N.W.
Washington 6, D.C.
Telephone District 7–1114

McDermott Insurance

Professional and Personal Insurance
Placement for the Doctor

1130 Seventeenth Street, N.W.
Washington 6, D.C.

Telephone District 7–1114

New and Enlarged Facilities make it possible to accept additional subscribers for

TELEPHONE SECRETARIAL SERVICE

to the Medical Society's

MEDICAL BUREAU

24-hour Telephone Service

For further information call

REPUBLIC 7-6100

BEUCHLER'S

915-19th Street, N.W. Republic 7-6006

THE GIBSON COMPANY

57 years serving the medical profession

Medical and Surgical Supplies
Hospital, Invalid and Sickroom Supplies
Physiotherapy Equipment
Surgical Fitting Specialists
Expert Medical Equipment Repair Service

1908 K Street, N.W. Federal 8-2688

1942 . . . NINETEENTH ANNIVERSARY . . . 1962

PROFESSIONAL BUSINESS MANAGEMENT, INC.

JOHN C. POST, *President*

A PERSONAL SERVICE DESIGNED TO ASSIST THE DOCTOR WITH THE BUSINESS SIDE OF MEDICAL PRACTICE.

• *Medical Management Specialists* •

1000 20th Street, N.W. Tel. FEderal 8-3200

THE LAUREL SANITARIUM LAUREL, MARYLAND

Geriatric
Hospital
Buildings in centre
of 122 acres.
ESTABLISHED 1905

Accommodations
available for
senile ambulatory
women who need
psychiatric care.

LICENSED FOR TREATMENT OF NERVOUS AND MENTAL DISEASES
Phone Parkway 5-1250—Jesse C. Coggins, M.D.—Medical Director

KALORAMA CONVALESCENT HOME, INC.

Licensed by the D. C. Department of Licenses and Inspections

INSTITUTIONAL CARE

for the medical management of
the acute stages of alcoholism.

2001 KALORAMA ROAD
at 20th Street, N.W. Decatur 2-2681

THE
BIRTCHER MEDICAL DISTRIBUTORS
OF D. C.

Complete lines of
Physical and Hydrotherapy Equipment
Electro-Surgical Equipment
Electrocardiograph–Cardioscope–
Defibrillator and Heart Pacer

Distributors for:

PROFEXRAY X-RAY EQUIPMENT

A complete line of Radiographic and Fluoroscopic Equipment from the small Portable to 900 ma–150 KVP and superficial therapy. Also, most makes of X-ray accessories.

New and used equipment always in stock.

3314 M Street, N.W., Washington 7, D. C.
FEderal 3-2660

T. J. STRATTON

MEDICAL EQUIPMENT REPAIR SERVICE

Official factory service station for
many manufactures.

In the Chevy Chase Area

FOR THE BEST IN DRUGS AND SERVICE

IT'S

HIGGER'S

Complete Biological Stocks
Marcelle Hypo Allergenic Toiletries

HIGGER'S DRUGS, INC.
5015-17 Connecticut Avenue
Phone: Woodley 6-1815

"We Make Business Possible"

MALLOREY OFFICE SUPPLY COMPANY

Commerical Stationers
Printing
Office Supplies • Engraving Office Furniture

732 9th Street, N.W.
Washington 1, D. C.
Republic 7-0414

Insurance For The Doctor

Russell, Marsh & Kennedy, Inc.
(formerly Hufty, Eubank & Russell, Inc.)

WILLIAM G. RUSSELL
President
1832 M St., N.W.
FEderal 8-7600

PROFESSIONAL LIABILITY*
EMPLOYEES' WORKMEN'S COMPENSATION
EQUIPMENT FLOATER
FIRE INSURANCE CONTENTS
BUSINESS EXPENSE DISABILITY
BONDS ON EMPLOYEES
AUTOMOBILE INSURANCE
OFFICE PUBLIC LIABILITY

ANNUITIES—FIXED & VARIABLE
NON-CAN DISABILITY INCOME
LOW COST TERM LIFE INSURANCE
PENSION PLANS FOR DOCTORS
PENSION PLANS FOR EMPLOYEES

**Endorsed by* MEDICAL SOCIETY OF D. C.

ethically promoted . . . .

COOK PRODUCTS

. . . . reasonably priced

NEW—for your next detail on COOK PRODUCTS:

FERROCETTES
IRON WITH ASCORBIC ACID IN CHEWABLE TABLET FORM

NAUSERTS
A SUPPOSITORY FOR CONTROL OF NAUSEA AND VOMITING IN CHILDREN

E. K. Cook & Company, Inc. **Bethesda, Maryland**

BOOKS RECEIVED

Acknowledgment is made of the following books which have recently been received.

Textbook of Ophthalmology, 7th ed. Francis Heed Adler, M.D. Price, $9.00. Pp. 560, with 288 figures and 26 color plates. Philadelphia: Saunders, 1962.

Practical Anesthesiology. Joseph F. Artusio, Jr., M.D., and Valentino D. B. Mazzia, M.D. Price, $7.75. Pp. 318, with 28 illustrations. St. Louis: Mosby, 1962.

A Study of Psychophysical Methods for Relief of Childbirth Pain. C. Lee Buxton, M.D. Price, $4.75. Pp. 116. Philadelphia: Saunders, 1962.

Dissemination of Cancer—Prevention and Therapy. Warren H. Cole, M.D., F.A.C.S., Gerald O. McDonald, M.S., M.D., F.A.C.S., Stuart S. Roberts, M.S., M.D., and Harry W. Southwick, M.D., F.A.C.S. Price, $12.75. Pp. 462, illustrated. New York: Appleton, 1962.

Current Therapy 1962; latest approved methods of treatment for the practicing physician. Edited by Howard F. Conn, M.D., with 12 Consulting Editors. Price, $12.50. Pp. 790. Philadelphia: Saunders, 1962.

Psychological Development in Health and Disease. George L. Engel, M.D. Price, $7.50. Pp. 435. Philadelphia: Saunders, 1962.

Medical State Board Questions and Answers, 10th ed. Harrison F. Flippin, M.D. Price, $9.50. Pp. 507. Philadelphia: Saunders, 1962.

Pediatric Diagnosis: Interpretation of Signs and Symptoms in Different Age Periods, 2nd ed. Morris Green, M.D., and Julius B. Richmond, M.D. Price, $13.00. Pp. 541. Philadelphia: Saunders, 1962.

Pediatrics, 13th ed. L. Emmett Holt, Jr., M.D., Rustin McIntosh, M.D., and Henry L. Barnett, M.D. Price, $18.00. Pp. 1395, with illustrations. New York: Appleton, 1962.

The Immunology of Rheumatism. Jerzy B. Kwapinski, M.D., C.Sc., and Marshall L. Snyder, Ph.D. Price, $9.00. Pp. 255. New York: Appleton, 1962.

An Atlas of Head and Neck Surgery. John M. Loré, Jr., M.D., F.A.C.S. Illustrated by Robert Wabnitz. Price, $25.00. Pp. 490, with 207 illustrations. Philadelphia: Saunders, 1962.

Essentials of Pediatric Psychiatry. Ruben Meyer, M.D., Morton Levitt, Ph.D., Mordecai L. Falick, M.D., and Ben O. Rubenstein, Ph.D. Price, $6.00. Pp. 208. New York: Appleton, 1962.

MAXWELL
AND
TENNYSON
PHARMACISTS

"Where Pharmacy is a Profession"

M+T

Washington, D. C.

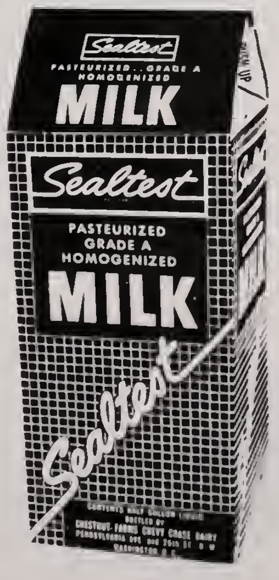
1801 Eye Street	NAtional 8-0206
1835 Eye Street	REpublic 7-4600
1726 Eye Street	STerling 3-7077

Prescription called for and delivered without extra charge

Exclusive Distributor
Marcelle Cosmetics*
HYPO-ALLERGENIC
Chicago, Illinois

*Accepted for advertising in publications of the American Medical Association.

GREATER WASHINGTON'S
MOST POPULAR VITAMIN
D HOMOGENIZED MILK



CLASSIFIED ADVERTISEMENTS

Advertisements under the following headings are charged at the rate of $5.00 for one insertion of 50 words or less; $4.00 each for three insertions; and $3.00 each for six insertions or more. All advertisements are payable in advance; the Editorial Board reserves the right to edit copy. Closing date for new copy, 20th of month preceding date of issue.

Classified advertisements of a professional nature are free to members.

SITUATION WANTED

INTERNIST, 53, with special training and interests in diagnostics, rheumatology, and physical medicine. GWU (Med.), Georgetown (Int. Med.); special training at other medical centers. Desires challenging opportunity or association in the Greater Washington Area. D.N.B. and licensed in D.C., Md. and Va. Address Box 68, 1718 M Street, N.W. (6)

PHYSICIANS WANTED

LICENSED PHYSICIANS for group practice. Four positions available for 24-hour coverage of Emergency Room at Suburban Hospital, Bethesda, Md. Remuneration on a fee-for-service basis. Telephone Mr. Payne, Oliver 6-6000.

FOR GENERAL MEDICINE urgently needed for either part-time or full-time work in well established practice in downtown medical center with idea of permanent association. Address Box 35, 1718 M Street, N.W. (6)

PEDIATRICIAN for part-time work in medical clinic in Southeast Washington. Address Box 46, 1718 M Street, N.W. (6)

REAL ESTATE

FOR SALE OR RENT: Ideal house-office for doctor and family: centrally air-conditioned rambler with 4 bedrooms and full basement; front and back porches; beautiful, fenced yard and shrubs. Located on University Blvd. between Langley Park and Four Corners, Md. Telephone Juniper 8-8700.

FOR SALE: Large house, including physician's office and well established practice, with or without medical equipment. All air-conditioned. Located at intersection of 16th Street and Military Road, N.W. Price, $45,000. Address Box 2, 1718 M Street, N.W. (6)

OFFICE SPACE AVAILABLE

FOR RENT: Office space, air-conditioned, at 1150 Connecticut Avenue, N.W. Consulting room, 2 examining rooms, secretary's office, large reception room furnished, laboratory, 2 bathrooms, dark room, X-ray room (10 by 15 feet) suitable for other purposes. Internist or dermatologist. Rental, $250. Address Box 57, 1718 M Street, N.W. (6)

FOR RENT: Newly decorated suite, fully air-conditioned, consisting of reception, consultation and 2 examining rooms, bath. Private parking. Washington Blvd. at McKinley Road, North Arlington, Va., Westover Area. Present specialists—GP, pediatrician, internist and dentist. OB-GYN needed for consultation and referral. Excellent opportunity for either auxiliary or main office. Telephone Jackson 7-7721.

TO SHARE: Will share office space with qualified internist or GP. Air-conditioned suite in new apartment building in a central, redeveloping area. Excellent potential. Address Box 13, 1718 M Street, N.W. (6)

FOR RENT: In-town 5-room office suite fully equipped; complete laboratory. Will rent by hour, day or part-time. Currently used by internist 20 hours week. New building, near George Washington Hospital. Parking spaces available. Address Box 24, 1718 M Street, N.W. (6)

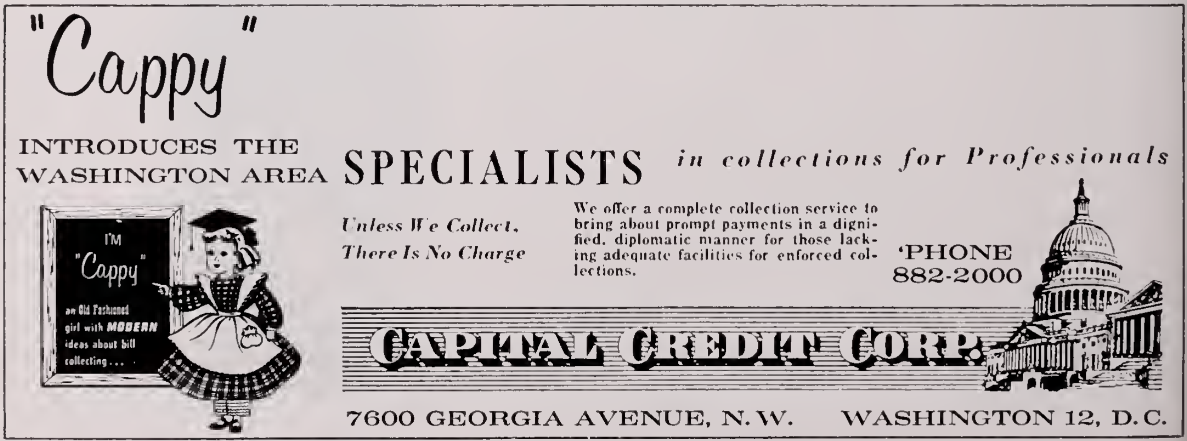
TO SHARE: First floor offices, 600 sq. ft. Need for dermatologist, psychiatrist, orthopedist or neurosurgeon in densely populated suburban area. Rent, $80 month. Location: 1013 University Blvd. East, Langley Park, Md. Telephone 434-3388.

FOR RENT: Office suite at 1625 Massachusetts Avenue, N.W.: reception room, 2 private offices, 2 treatment rooms, approximately 950 sq. ft.; air-conditioned. One parking space. Reasonable rental. Telephone Hobart 2-4700 or Randolph 6-1644.

FOR RENT: New Medical Building, 1726 Eye Street, N.W.: one large suite, 1400 sq. ft., or may be subdivided. All utilities furnished including switchboard service. Central air-conditioning. Telephone Manager, National 8-2636.

FOR RENT: Parkwood Medical Building, 1746 K Street, N.W.: two-room suite, private entrance, large rooms. Available now. Telephone 296-4100, ext. 42.

TO SHARE: Offices in Silver Spring in new medical building on Spring Street. Fully furnished and equipped. Full-time nurse. Telephone 588-4820.


"Cappy"

INTRODUCES THE WASHINGTON AREA SPECIALISTS *in collections for Professionals*

Unless We Collect, There Is No Charge

We offer a complete collection service to bring about prompt payments in a dignified, diplomatic manner for those lacking adequate facilities for enforced collections.

'PHONE
882-2000

CAPITAL CREDIT CORP.

7600 GEORGIA AVENUE, N.W. WASHINGTON 12, D.C.
I'M
"Cappy"
an Old Fashioned girl with MODERN ideas about bill collecting . . .

After October 1

New Showrooms and Warehouse

7815 Woodmont Avenue
Bethesda, Maryland

New Telephone Number
656–2000

Beth-Mont Surgical Supply Co.

"Registered Nurses—For Private Duty"

U. S. EMPLOYMENT SERVICE
Professional Office

GRADUATE NURSES REGISTRY
1000 16th Street, N.W.
Washington 6, D. C.

CALL—DISTRICT 7-1129

24-hour telephone service—
7 days a week

CAPITAL NURSE REGISTRY

(Est. 1910)

Undergraduate
Practical

Nurses
Recommended
by Physicians

All Nurses Have Had Hospital Training

24 Hour Telephone Service

One of Washington's outstanding
Registries, serving physicians
and surgeons since 1910

Licensed by District of Columbia

Your Patronage Solicited

Telephone
RAndolph 3-2600 or 3-1771

Surgical Supplies and Equipment

Complete Fitting Service for
Ladies and Men

NELSON KLOMAN SURGICAL SUPPLY CO.

1018 - 18th Street, N.W
Washington 6, D. C.

***Telephone*: FEderal 8-5245**

THE FINEST
COSTS NO MORE

For over a hundred years the people of Washington have depended on Joseph Gawler's Sons in time of bereavement. Over the generations, Gawler's has built and maintained a tradition of service . . . reverent, fitting and beautiful. It has been our constant effort . . . our duty, to maintain the standard in which the finest families have placed their implicit trust.

a century of service

JOSEPH
GAWLER'S
SONS, INC.

FUNERAL DIRECTORS
1756 Pennsylvania Avenue, N.W.
(Just west of the White House)
Telephone: NAtional 8-5512

NURSES REGISTRY

EXPERIENCED UNDERGRADUATES
& PRACTICAL NURSES

Recommended by Physicians
At Your Service for Day or Night Duty
In Washington and nearby area

CALL—RAndolph 6-6706
(A non-profit organization)

THE MEDICAL ANNALS OF THE DISTRICT OF COLUMBIA is published by the Medical Society of the District of Columbia for the promulgation of information of scientific, general medical and personal interest.

Manuscripts for publication, news items, books for review, and correspondence relating to the editorial management should be sent to DR. WALLACE M. YATER, editor, MEDICAL ANNALS OF THE DISTRICT OF COLUMBIA, 1718 M Street, N.W., Washington 6, D. C.

Articles are accepted for publication on condition that they are contributed solely to this journal. Manuscripts must be typewritten, double spaced, and the original copy submitted. Photographs and drawings for illustrations must be carefully marked and show clearly what is intended. MEDICAL ANNALS will bear the cost of printing two cuts accompanying manuscripts submitted for publication. The cost of printing more than 2 cuts must be borne by the author.

Bibliographies should include the name of author (last name and initials), exact title of article, name of periodical, with volume, page, month (day of month in weekly), and year. References should be numbered consecutively in the order in which they appear in the text.

Matter appearing in the ANNALS is covered by copyright but, as a rule, no objection will be made to its reproduction in reputable medical journals, if proper credit is given. However, the reproduction for commercial purposes of articles appearing in the MEDICAL ANNALS OF THE DISTRICT OF COLUMBIA will not be permitted.

Reprints may be obtained at cost.

THE MEDICAL ANNALS OF THE DISTRICT OF COLUMBIA is published monthly. Subscription is included in the annual dues of members. To non-members the annual subscription price is: Domestic $4.50; Canadian, $5.00; foreign $5.50, including postage; single copies, fifty cents.

Checks, etc. should be made payable to the Medical Society of the District of Columbia.

PHYSICIAN SUPPLIES
ANATOMICAL SUPPORTS
HOSPITAL EQUIPMENT

Instruments
Blood Chemistry Reagents
Disposable Products
Anatomical Supports—Stockings
Wheel Chairs—Hospital Beds
Office Equipment—Colostomy Supplies

Call ASSCO for Fast Delivery

ASSCO 1958 INTEGRUM ET SERVITIUM

ACCREDITED
SURGICAL SALES
3226 Wisconsin Ave., N.W. EM 3-9595
Washington, D. C.

NATIONAL AND REGIONAL MEETINGS

October 2–5: American Roentgen Ray Society. Shoreham Hotel, Washington, D.C. Address: Dr. C. Allen Good, Secretary, Mayo Clinic, Rochester, Minn.

October 4–6: District IV, American College of Obstetricians and Gynecologists. Barringer Hotel, Charlotte, N. C. Address: Dr. Lawrence L. Hester, Jr., *District Secretary*, 55 Doughty Street, Charleston 16, S. C.

October 12–13: American Medical Writers Association. Sheraton-Park Hotel, Washington. Address: Dr. Robert J. Benford, President, Mid-Atlantic Chapter, 1411 K Street, N.W., Washington 5, D. C.

October 15–17: Second Interstate Scientific Assembly. Sheraton-Park Hotel, Washington. Address: Mr. Theodore Wiprud, 1718 M Street, N.W., Washington 6, D. C.

October 15–19: 48th Annual Clinical Congress, American College of Surgeons. Atlantic City, N. J. Address: Dr. William E. Adams, *Secretary*, 40 East Erie Street, Chicago 11, Ill.

October 21–26: American Society of Anesthesiologists, Inc. Statler-Hilton Hotel, New York City. Address: Mr. John W. Andes, *Executive Secretary*, 515 Busse Highway, Park Ridge, Ill.

October 22–23: 1962 Scientific Session, American Cancer Society. Biltmore Hotel, New York City. Address: Director of Professional Education, ACS, 521 West 57th Street, New York 19, N. Y.

October 25–27: Divisional Meeting, American Psychiatric Association. Shoreham Hotel, Washington. Address: Dr. Norman Taub, 3900 Garrison Street, N.W., Washington 16, D. C.

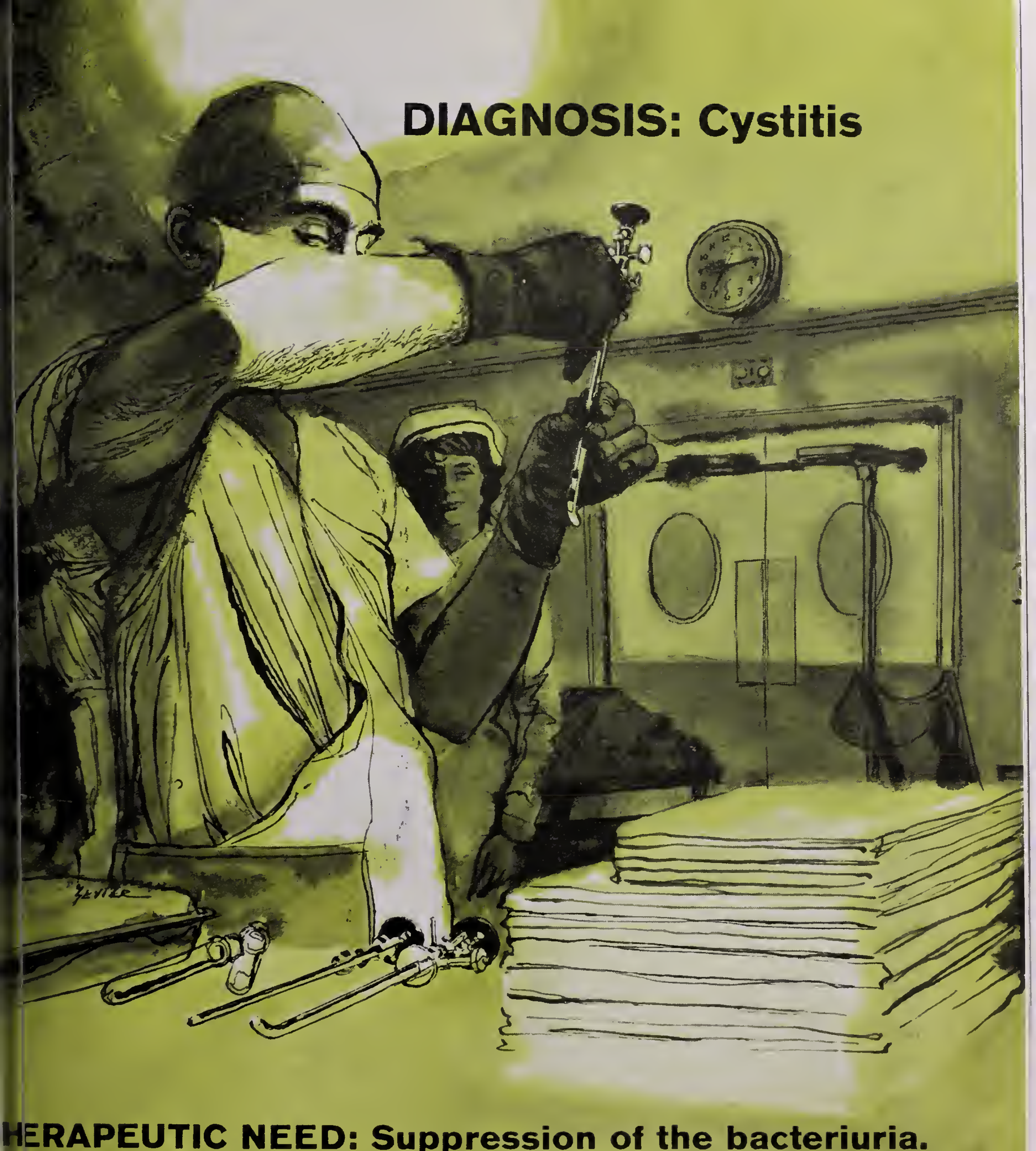
October 26–30: American Heart Association, Inc. Sheraton-Cleveland Hotel, Cleveland, Ohio. Address: Mr. Rome A. Betts, *Executive Director*, 44 East 23rd Street, New York 10, N. Y.

October 27–November 1: American Academy of Pediatrics. Palmer House, Chicago. Address: Dr. E. H. Christopherson, *Executive Director*, 1801 Hinman Avenue, Evanston, Ill.

October 28: Annual Meeting of Association of Clinical Scientists. Statler-Hilton Hotel, Washington, D. C. Address: Dr. Robert P. MacFate, Secretary, 54 West Hubbard Street, Chicago 10, Ill.

October 28–31: 27th Annual Convention, American College of Gastroenterology. Morrison Hotel, Chicago, Ill. Address: Mr. Daniel Weiss, *Executive Director*, 33 West 60th Street, New York 23, N. Y.

November 11–14: Association of Military Surgeons of the United States. Mayflower Hotel, Washington. Address: Colonel Robert E. Bitner, Secretary, 1726 Eye Street, N.W., Washington 6, D. C.



DIAGNOSIS: Cystitis

HERAPEUTIC NEED: Suppression of the bacteriuria.

NTIBIOTIC: DECLOMYCIN®

Demethylchlortetracycline Lederle

ause it provides effective antibacterial activity in the nary tract.

t complete information on indications, dosage, precautions and contraindications from your Lederle representative, or write to Medical Advisory Department.

LE LABORATORIES, A Division of AMERICAN CYANAMID COMPANY, Pearl River, New York Lederle

If you have patients on a cholesterol depressant diet, this will be welcome news:

General Mills is now making available, through grocery stores, a Safflower Oil which is totally acceptable in the diet, and which is priced reasonably.

SAFF·O·LIFE

Safflower Oil

14 FL OZ
Betty Crocker
poly-unsaturated
Saff-o-life®
SAFFLOWER OIL
for salads, baking and frying
Freshness preserved with BHA, BHT, propyl gallate, citric acid in propylene glycol.
General Mills

As you know, Safflower Oil is higher in poly-unsaturates and lower in saturated fats than any other type of readily available vegetable oil.

When an increased poly-unsaturated fatty acid intake is desirable, you can recommend Saff-o-life Safflower Oil. You can do so with the assurance that the patient will find it completely appetizing—clear, light and fresh-smelling—and priced at a level which poses no problem.

Ratio of Linoleates* to Saturates
*(Poly-Unsaturates)

SAFFLOWER OIL • 9.0 to 1.0
CORN OIL • 5.3 to 1.0
SOYBEAN OIL • 3.5 to 1.0
COTTONSEED OIL • 2.0 to 1.0
PEANUT OIL • 1.6 to 1.0

Physicians who wish recipes using Saff-o-life Safflower Oil are invited to write directly to General Mills, Inc. Address your inquiries to Professional Services Director, General Mills, Inc. Dept. 120, 9200 Wayzata Blvd., Minneapolis 26, Minnesota.

INDEX OF ADVERTISERS

Page

Bank

Riggs National Bank, 4

Business Counseling

Professional Business Management, 52

Collection Agencies

Capital Credit Corporation, 56
Credit Bureau, Inc., 5

Dietetic Products

Duffy-Mott Company, 15
General Mills, Inc., 60
Sealtest Foods, 55

Funeral Homes

Joseph Gawler's Sons, Inc., 57
S. H. Hines & Company, 51

Insurance

McDermott Insurance, 52
Mutual of Omaha, 3-C
Eugene Roesser, 52
Russell, Marsh & Kennedy, Inc., 54
St. Paul Fire & Marine Insurance Company, 30

Nurse Registries

Association of Undergraduate and Practical Nurse Registry, 57
Capital Nurse Registry, 57
U. S. Employment Service for D. C., 57

Office Furniture and Supplies

W. D. Campbell Company, 6
Mallorey Office Supply Company, 53

Pharmaceuticals

Abbott Laboratories, 19–20
Ames Company, 48
Bristol Laboratories, 28–29
The Brown Pharmaceutical Company, 10
Burroughs Wellcome and Company, 10, 43
Burton, Parsons & Company, 22
Ciba Pharmaceutical Products, 42
E. K. Cook & Company, Inc., 54
Davies, Rose & Company, 31
Endo Laboratories, 38
Glenbrook Laboratories, 27
Charles C. Haskell & Company, 24
Lederle Laboratories, 14, 36–37, 59
Thomas Leeming & Company, Inc., 11
Eli Lilly & Company, 32
Parke, Davis & Company, 2-C, 3
Pfizer Laboratories, 8–9
Physicians Products Company, 49
A. H. Robins Company, 12, 45, 46, 47
Roche Laboratories, 4-C
Schering Corporation, 35
G. D. Searle & Company, 33
Smith, Kline & French Laboratories, 21, 50
Upjohn Company, 23, 40–41
Wallace Laboratories, 7, 17, 39
Winthrop Laboratories, 13, 25, 62

Pharmacies

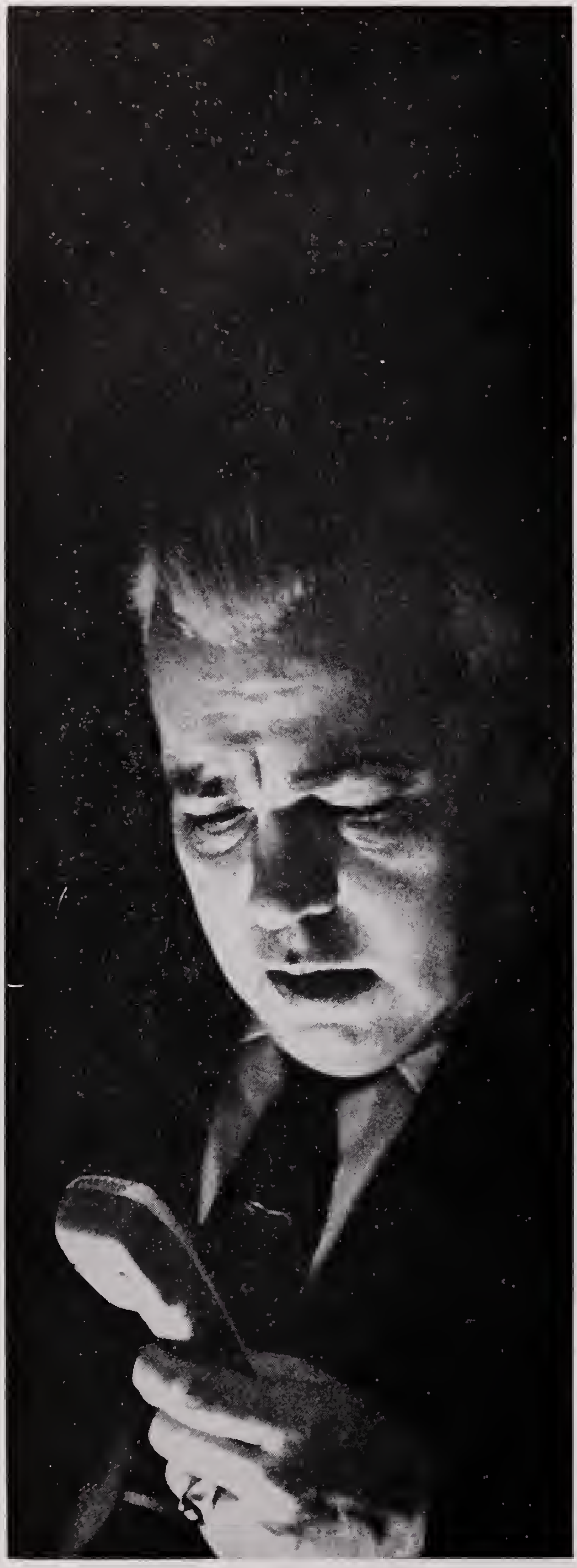
Higger's Drugs, 53
Maxwell & Tennyson, 55
Peoples Drug Stores, 44

Sanitariums

Kalorama Convalescent Home, 53
Kensington Gardens, 34
Laurel Sanitarium, 53

Surgical Supplies

Accredited Surgical Sales, 58
Beth-Mont Surgical Supply Company, 57
Beuchler's, Inc., 52
Birtcher Medical Distributors of D. C., 53
Gibson Company, 52
Nelson Kloman Surgical Supply Company, 57



Day and night–
less wheezing, coughing, labored respiration in chronic bronchitis and emphysema

New Isuprel Compound Elixir is a balanced expectorant bronchodilator. It contains potassium iodide to promote expectoration and relieve dry cough. Its three bronchodilators, Isuprel, ephedrine, and theophylline, keep bronchi continuously dilated. Luminal is included to negate possible side effect from adrenergic medication and to provide very mild sedation for the patient.

New Isuprel Compound Elixir alleviates symptoms...prolongs relief in chronic bronchitis and emphysema.

Each good-tasting vanilla-flavored tablespoon (15 cc.) contains:

Isuprel® (brand of isoproterenol) HCl	2.5 mg.
Ephedrine sulfate	12 mg.
Theophylline	45 mg.
Potassium iodide	150 mg.
Luminal® (brand of phenobarbital)	6 mg.
Alcohol	19%

Adult Dose: 2 tablespoons 3 or 4 times daily.

How Supplied: Isuprel Compound Elixir is supplied in bottles of 16 fl. oz.

Before prescribing be sure to consult Winthrop's literature for additional information about dosage, possible side effects and contraindications.

New ISUPREL® compound ELIXIR

Winthrop LABORATORIES
New York 18, N.Y.

ISUPREL AND LUMINAL, TRADEMARKS REG. U.S. PAT. OFF.

IMPORTANT ANNOUNCEMENT

NOW -- A NEW PLAN OF INCOME PROTECTION INSURANCE DESIGNED TO SUPPLEMENT YOUR OFFICIAL D.C. MEDICAL SOCIETY PLAN.

OUTSTANDING FEATURES:

- ✓ LIFETIME BENEFITS FOR ACCIDENTS.
- ✓ UP TO AGE 65 FOR SICKNESS.
- ✓ SICKNESS BENEFITS DOUBLE AFTER 5 YEARS OF DISABILITY UP TO AGE 65.

Available only to members now carrying the Basic Plan, Policy Form LMN.

For additional details write or call:

Joseph E. Jones
102 Ring Building
1200 - 18th St. N. W.
Washington 6, D.C.

FEderal 8-3000

Mutual of Omaha

MUTUAL BENEFIT HEALTH
& ACCIDENT ASSOCIATION,
OMAHA, NEBRASKA

specific
for anxiety
& tension

Librium

The singular specificity of Librium in controlling anxiety and tension has proven to be an advantage in a wide range of disorders characterized by anxiety of varying degrees. Notably effective in patients whose symptoms are primarily emotional, Librium is equally valuable when organic disease is aggravated or prolonged by accompanying anxiety. Coupled with its effectiveness is an outstanding record of safety. Librium has few, if any, of the unwanted side effects associated with tranquilizers and daytime sedatives—no extrapyramidal effects, no autonomic blocking, and no dulling of mental alertness. Consult literature and dosage information, available on request, before prescribing.

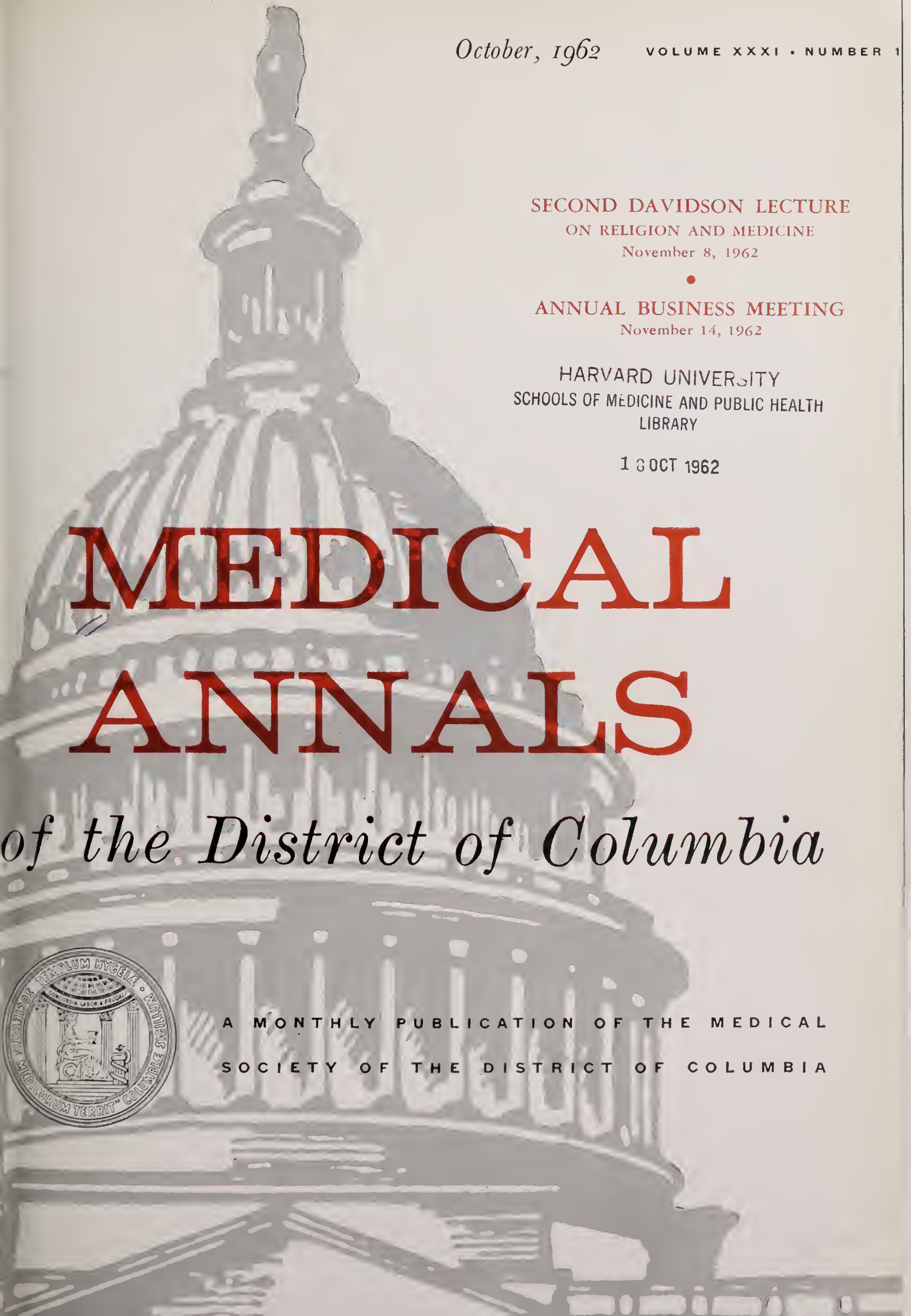
the successor to the tranquilizers

LIBRIUM® Hydrochloride—7-chloro-2-methylamino-5-phenyl-3H-1,4-benzodiazepine 4-oxide hydrochloride

ROCHE

ROCHE

October, 1962 VOLUME XXXI • NUMBER 1



SECOND DAVIDSON LECTURE
ON RELIGION AND MEDICINE
November 8, 1962

•

ANNUAL BUSINESS MEETING
November 14, 1962

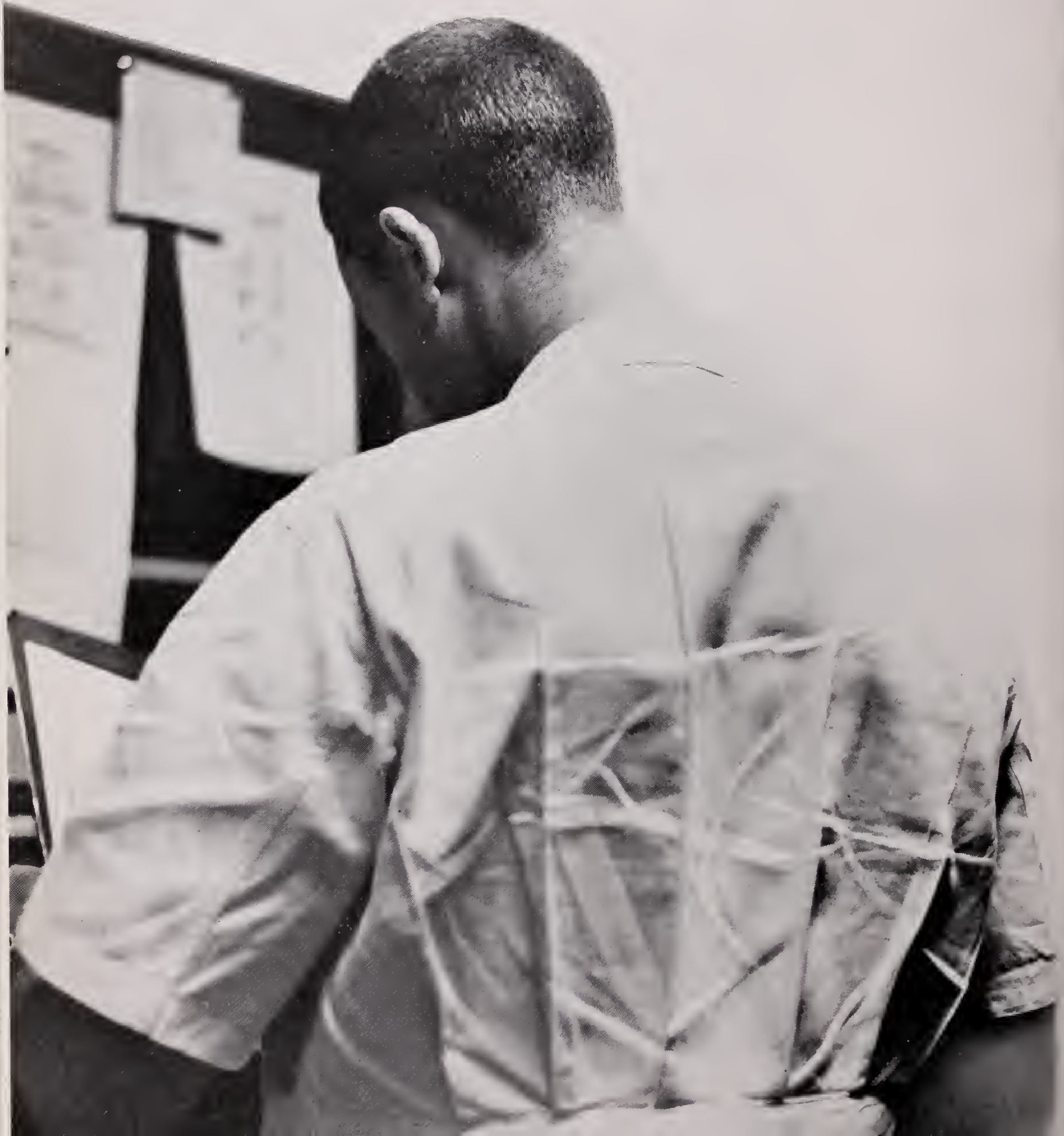
HARVARD UNIVERSITY
SCHOOLS OF MEDICINE AND PUBLIC HEALTH
LIBRARY

1 8 OCT 1962

MEDICAL ANNALS of the District of Columbia

A MONTHLY PUBLICATION OF THE MEDICAL SOCIETY OF THE DISTRICT OF COLUMBIA

in urinary tract infections...
the most common pathogens
respond to



CHLOROMYCETIN®

(chloramphenicol, Parke-Davis)

That the urinary tract is especially vulnerable to invasion by gram-negative pathogens is an observation often confirmed. Also amply documented[1-5] is the finding that many common offenders in urinary tract infections remain susceptible to CHLOROMYCETIN.

In one investigator's experience, chloramphenicol has maintained a wide and effective activity range against infections of the urinary tract. "It is particularly useful against the Coliform group, certain Proteus species, the micrococci and the enterococci."[2] Other clinicians draw attention to the "frequency for the need" of CHLOROMYCETIN inasmuch as "...a high percentage of *Escherichia coli* and Klebsiella-Aerobacter are sensitive to it."[1] Moreover, enterococci, other streptococci, and most strains of staphylococci exhibit continuing sensitivity to CHLOROMYCETIN.[1]

Successful therapy in urinary tract infections is dependent upon accurate identification and susceptibility testing of the invading organism, as well as the prompt correction of obstruction or other underlying pathology.[6]

CHLOROMYCETIN (chloramphenicol, Parke-Davis) is available in various forms, including Kapseals® of 250 mg., in bottles of 16 and 100. See package insert for details of administration and dosage.

Warning: Serious and even fatal blood dyscrasias (aplastic anemia, hypoplastic anemia, thrombocytopenia, granulocytopenia) are known to occur after the administration of chloramphenicol. Blood dyscrasias have occurred after both short-term and prolonged therapy with this drug. Bearing in mind the possibility that such reactions may occur, chloramphenicol should be used only for serious infections caused by organisms which are susceptible to its antibacterial effects. Chloramphenicol should not be used when other less potentially dangerous agents will be effective, or in the treatment of trivial infections, such as colds, influenza, or viral infections of the throat, or as a prophylactic agent.

Precautions: It is essential that adequate blood studies be made during treatment with the drug. While blood studies may detect early peripheral blood changes, such as leukopenia or granulocytopenia, before they become irreversible, such studies cannot be relied upon to detect bone marrow depression prior to development of aplastic anemia.

References: (1) Katz, Y. J., & Bourdo, S. R.: *Pediat. Clin. North America* **8**:1259, 1961. (2) Malone, F. J., Jr.: *Mil. Med.* **125**:836, 1960. (3) Ullman, A.: *Delaware M. J.* **32**:97, 1960. (4) Petersdorf, R. G.; Hook, E. W.; Curtin, J. A., & Grossberg, S. E.: *Bull. Johns Hopkins Hosp.* **108**:48, 1961. (5) Whitaker, L.: *Canad. M. A. J.* **84**:1022, 1961. (6) Martin, W. J.; Nichols, D. R., & Cook, E. N.: *Proc. Staff Meet. Mayo Clin.* **34**:187, 1959.

PARKE-DAVIS

PARKE, DAVIS & COMPANY, Detroit 32, Michigan

00462

The

RIGGS

NATIONAL BANK

of WASHINGTON, D. C.

FOUNDED 1836

LARGEST BANK IN THE NATION'S CAPITAL

COMPLETE BANKING AND TRUST SERVICE

RESOURCES OVER $500,000,000

RIGGS NATIONAL BANK
SUCCESSOR TO RIGGS & CO.

MAIN OFFICE
1503 PENNSYLVANIA AVENUE, N.W.
(Opposite U. S. Treasury)

BRANCHES

FARMERS & MECHANICS
Wisconsin Ave. and M St., N.W.

DUPONT CIRCLE
1913 Massachusetts Ave., N.W.

PARK ROAD
14th St. and Park Rd., N.W

SEVENTH & EYE STREET
7th and Eye St., N.W.

NORTHEAST BRANCH
1348 4th St., N.E.

SEVENTH & D STREET
318 7th Street, N.W.

NORTHWEST
1779 Columbia Rd., N.W.

FRIENDSHIP
Wisconsin Ave. and Warren St., N.W.

CHEVY CHASE
Conn. Ave. and Morrison St., N.W.

LINCOLN BRANCH
17th and H Sts., N.W.

WASHINGTON LOAN
AND TRUST BRANCH
F St. at 9th, N W.

17th & G STREET
BRANCH
14th and G Sts., N.W.

•

FACILITY
WALTER REED ARMY MEDICAL CENTER

TRUST DEPARTMENT OFFICE
1508 H Street, Northwest

Member Federal Deposit Insurance Corporation • Member Federal Reserve System

MEDICAL ANNALS

f the District of Columbia

EDITORIAL OFFICE:
1718 M Street, N.W., Washington 6
Telephone DIstrict 7-3111

Copyright, 1962,
by The Medical Society
of the District of Columbia.

Yearly Subscription, $4.50
Single Number, 50¢

Second-class postage paid at Baltimore, Md.
Published monthly at
Mount Royal and Guilford Avenues,
Baltimore 2, Maryland

Contents for October

SCIENTIFIC ARTICLES

The Armed Forces Institute of Pathology: 1862–1962. *Colonel Frank M. Townsend, USAF, MC*, Washington 565
Obscure Gastrointestinal Bleeding. *Ronald G. Latimer, M.D., and Alec Horwitz, M.D.*, Washington 569
A Clinical and Statistical Study of the Effect of Trichlormethiazide on Blood Pressure. *Raymond O. West, M.D.*, Takoma Park, Md. 574
Diseases of the Hip in Children. *Gerald D. Schuster, M.D.*, Washington 578
Acute Suppurative Parotitis Associated with Certain Drugs Used in the Treatment of Parkinsonism. *L. G. Walker, Jr., M.D.*, Atlanta, Ga., *Talmadge Hiebert, Ph.D.*, Chicago, *and Nicholas P. D. Smyth, M.B.*, Washington 586
Topical Dexamethasone in Dermatoses: An Evaluation of Patient Acceptance. *Arnold H. Gould, M.D., and Sidney Olansky, M.D.*, Washington 589

EDITORIALS

Vaccination Against Influenza 593
Impressions of Moscow 593
The Trademark 595
Your Office Assistants 596

(*Continued on page 6*)

Are You Really Different, DOCTOR?

It's an ironical fact that many patients feel doctors make so much money their bills can be neglected or even completely ignored. But these same patients buy automobiles, television sets, etc.

The doctor's office assistant can help prevent this by (1) checking a patient's record with The Credit Bureau, and (2) using Collectrite Service with those slow-pay patients.

Ask Mr. Kane
at NAtional 8-0680
for information.

PHYSICIANS AND DENTISTS ADJUSTMENT SERVICE

A Division of
The Credit Bureau, Inc.
Washington, D. C.

Contents for October

(Continued)

MISCELLANY

President's Page: The Coming Assembly 592

Woman's Auxiliary Officers for 1962–63 596

Annual Reports:

  Chairman of the Executive Board 597

  Board of Credentials 600

  Secretary-Treasurer 601

Cancer Page: Cancer of the Bladder 603

Military Service of Physicians 604

Report on International Cancer Congress in Moscow. *Jack E. White, M.D.,* Washington 605

Clinical Center Study of Glycogen Storage Disease 605

News and Personals 607

Medical Seminar Cruise 610

World Cruise for Members 610

Obituaries 611

Medical Societies with Limited Membership 615

Sections of the Medical Society of the District of Columbia 616

Medical Annals Staff *Adv. 16*

Book Reviews *Adv. 26*

Books Received *Adv. 39*

National and Regional Meetings *Adv. 59*

Classified Advertisements *Adv. 60*

Index of Advertisers *Adv. 63*

Specialists in Office PLANNING

The W. D. Campbell Company knows the fine points of business furniture and furnishings. It will pay you to call on our experienced planning and decorating service. No obligation on your part.

Put your problems in the creative hands of our experts.

Phone MEtro. 8–5660

The W. D. Campbell Company

WASHINGTON'S LEADING OFFICE FURNITURE SUPPLIERS, SINCE 1917

1014 Fifteenth Street, N.W. Washington 5, D. C.

Free parking in the building

THIS IS THE COLOR OF PROTECTION

BETADINE—The only germicide whose color indicates a germ-free environment—provides lasting protection and is the most potent non-irritating topical antiseptic known.

for the first time... a universal microbicidal agent that does not sensitize or retard healing

Betadine®

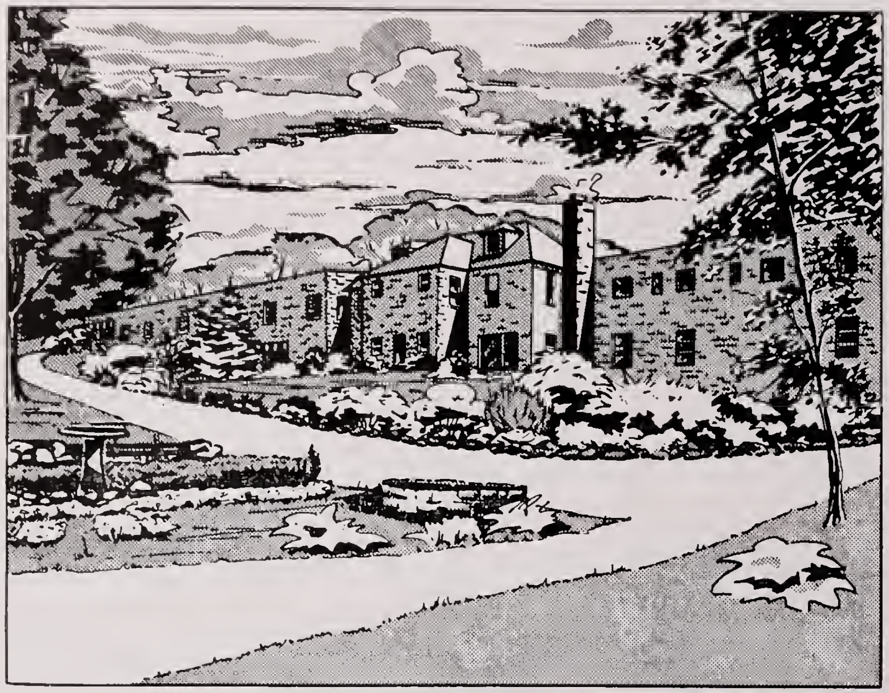
Povidone-Iodine NND

Kills bacteria, viruses, fungi, yeasts and protozoa on contact. Non-injurious to skin, exposed tissue or mucous membranes.

Products available: Betadine Solution • Betadine Aerosol Spray • Betadine Vaginal Douche • Betadine Vaginal Gel • Betadine Shampoo • Betadine Ointment • Betadine Swab Aids • Betadine Surgical Scrub •

TAILBY NASON COMPANY, INC.
Dover, Delaware Established 1905

In the Southeastern States Distributed by
PHYSICIANS PRODUCTS CO., INC.
Petersburg, Va. Literature on request



"All the Comforts of Home" . . .

for

POST OPERATIVE
•
MEDICAL
•
CONVALESCENT
•
DIABETIC
•
PARALYTIC
•
INVALID
•
AGED
•
CHRONIC
•
AMBULATORY
•
RETIRED GUESTS, ETC.

★ A MEDICAL INSTITUTION UNDER THE SUPERVISION OF REGISTERED NURSES ★
LICENSED BY STATE AND COUNTY

KENSINGTON GARDENS SANITARIUM

AN ULTRA-MODERN HOME IN THE SUBURBS ON TEN ACRES
WITH A COUNTRY ATMOSPHERE

3000 McComas Avenue — Kensington, Maryland

MEMBER OF

NATIONAL GERIATRICS SOCIETY
CARE OF THE AGED

AMERICAN NURSING HOME ASSOCIATION

MEMBER
AND MARYLAND NURSING HOME ASSOCIATION

- Rehabilitation Facilities
- Private and Semi-Private Rooms with Connecting Baths
- Beautifully Decorated
- Television in Spacious Lounges
- Large Porches
- Lovely Lawns and Shade Trees
- Supervised Diets
- Patients May Retain Their Own Physician
- 24-Hour Nursing Care
- Reasonable Rates
- Recreation and Physical Therapy

For Further Information Phone

LOckwood 5-2291 or LOckwood 5-0872

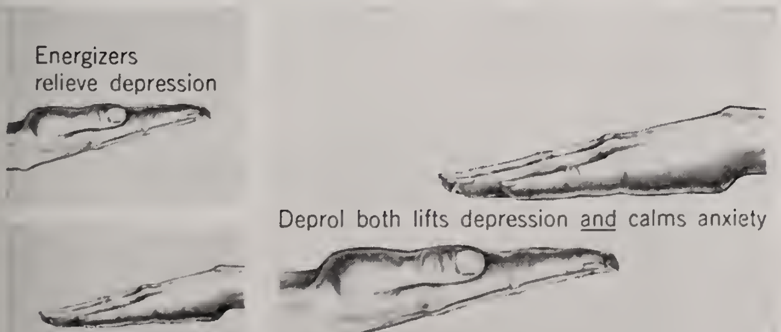
Proprietors-Administrators

LILLIAN H. and GEORGE L. BRICKER

LIFTS DEPRESSION ...AS IT CALMS ANXIETY

"I feel like my old self again!" Balanced Deprol therapy has helped relieve her insomnia and fatigue – her normal energy, drive and interest have returned.

Brightens mood...relaxes tension


Energizers
relieve depression
Deprol both lifts depression and calms anxiety
Tranquilizers
reduce anxiety

Dosage: Usual starting dose is 1 tablet q.i.d. When necessary, this may be increased gradually up to 3 tablets q.i.d. With establishment of relief, the dose may be reduced gradually to maintenance levels.

Composition: 1 mg. 2-diethylaminoethyl benzilate hydrochloride (benactyzine HCl) and 400 mg. meprobamate.

Supplied: Bottles of 50 light-pink, scored tablets.

Write for literature and samples.

Deprol®

WALLACE LABORATORIES
Cranbury, N. J.

CD-7393

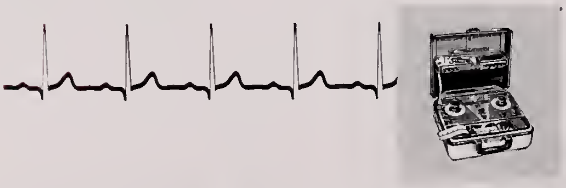
Analyze it . . .

Anyone who has ever taken a manual blood cell count knows how tedious it can be. And of course tedium breeds errors. Now, the Sanborn-Frommer Cell Counter makes blood analysis extremely simple — pour the sample, press the lever and within 25 seconds you can read the cell count directly on the panel meter.

Accurate, fast counting of red and white cells is made possible by the unique optical-electronic design of this new, economically-priced Sanborn instrument. Approximately 50 times the usual number of cells are sampled, greatly reducing the statistical error.

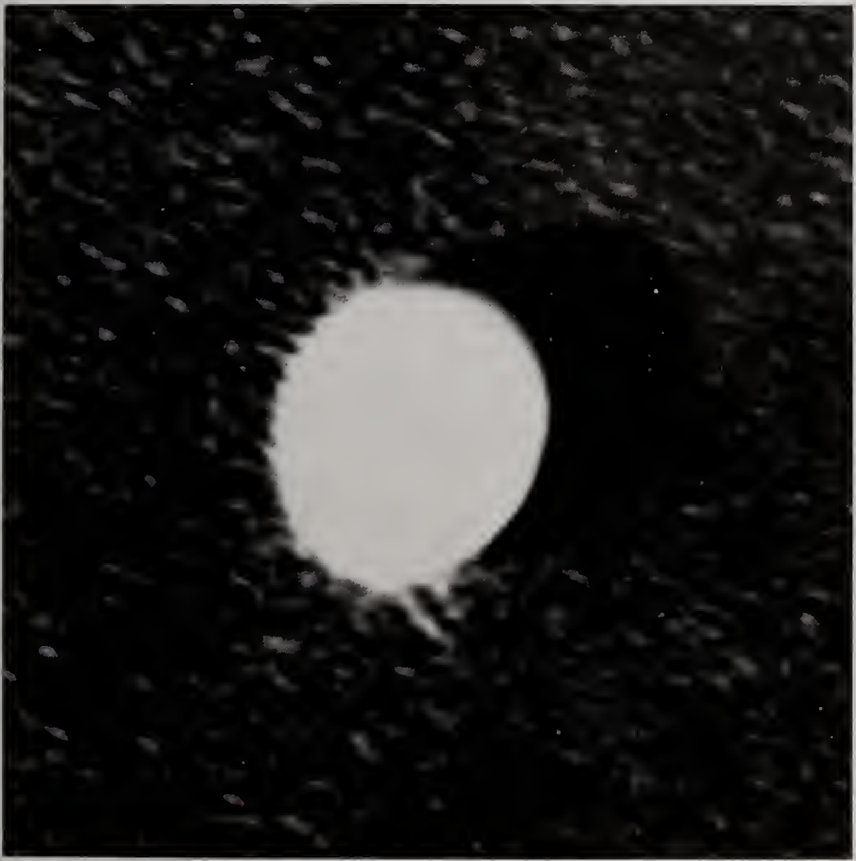
Hematology is a relatively new field for Sanborn instrumentation, but we are serving it with the same skills that are applied in the manufacture of electrocardiographs: the 2-speed Model 100 Viso Cardiette . . . its mobile counterpart the Model 100M Mobile Viso . . . and the compact, fully portable, 18-pound Model 300 Visette. These and all other Sanborn clinical, research and monitoring instruments are designed to dependably provide needed information in its most usable form.

on a Sanborn® cell counter



SANBORN COMPANY
MEDICAL DIVISION *Waltham 54, Mass.*

BETHESDA *Branch Office* 8118 Woodmont Ave.
Oliver 6-5170 and 6-5171
BALTIMORE *Resident Representative* 12 East 24th St., 889-1117, 1118



Goliath

David

Against the formidable and ubiquitous Staphylococcus aureus, PANALBA* gives you a powerful weapon. PANALBA is a selective combination of novobiocin (for its unique effectiveness against staph) and tetracycline (for its breadth of coverage). From the outset, your treatment has broader antibacterial coverage resulting from the simultaneous administration of two antibiotics that complement each other. They were carefully chosen for this purpose.

That is why PANALBA offers excellent chances for therapeutic success.

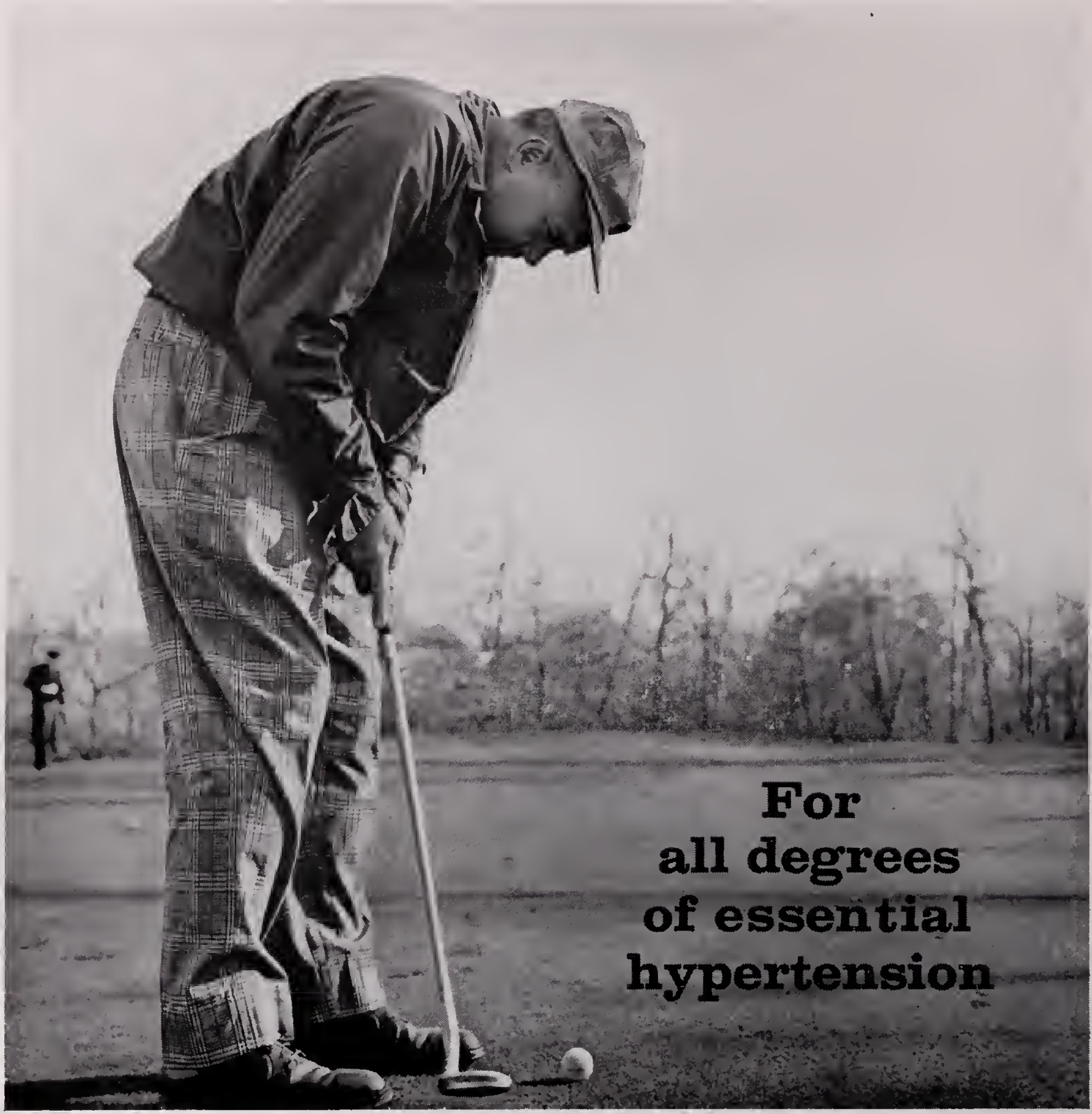
*TRADEMARK, REG. U.S. PAT. OFF.

COPYRIGHT 1962. THE UPJOHN COMPANY

Reminder
advertisement.
Please see
package insert for
detailed product
information.

Upjohn

THE UPJOHN COMPANY
KALAMAZOO, MICHIGAN



"relief of symptoms is striking with Rautrax-N"†

Rautrax-N decreases blood pressure for almost all patients with mild, moderate or severe essential hypertension. Rautrax-N also offers a new sense of relaxation and well-being in hypertension complicated by anxiety and tension. And in essential hypertension with edema and/or congestive heart failure, Rautrax-N achieves diuresis of sodium and chloride with minimal effects on potassium and other electrolytes.

Rautrax-N combines Raudixin (antihypertensive-tranquilizer) with Naturetin c̄ K (antihypertensive-diuretic) for greater antihypertensive effect and greater effectiveness in relief of hypertensive symptoms than produced by either component alone. Rautrax-N is also flexible (may be prescribed in place of Raudixin or Naturetin c̄ K) and economical (only 1 or 2 tablets for maintenance in most patients).

Supply: Rautrax-N — capsule-shaped tablets providing 50 mg. Raudixin, 4 mg. Naturetin and 400 mg. potassium chloride. *Rautrax-N Modified* — capsule-shaped tablets providing 50 mg. Raudixin, 2 mg. Naturetin and 400 mg. potassium chloride.

†Hutchison J. C.: Current Therap. Res. *2*:487 (Oct.) 1960.

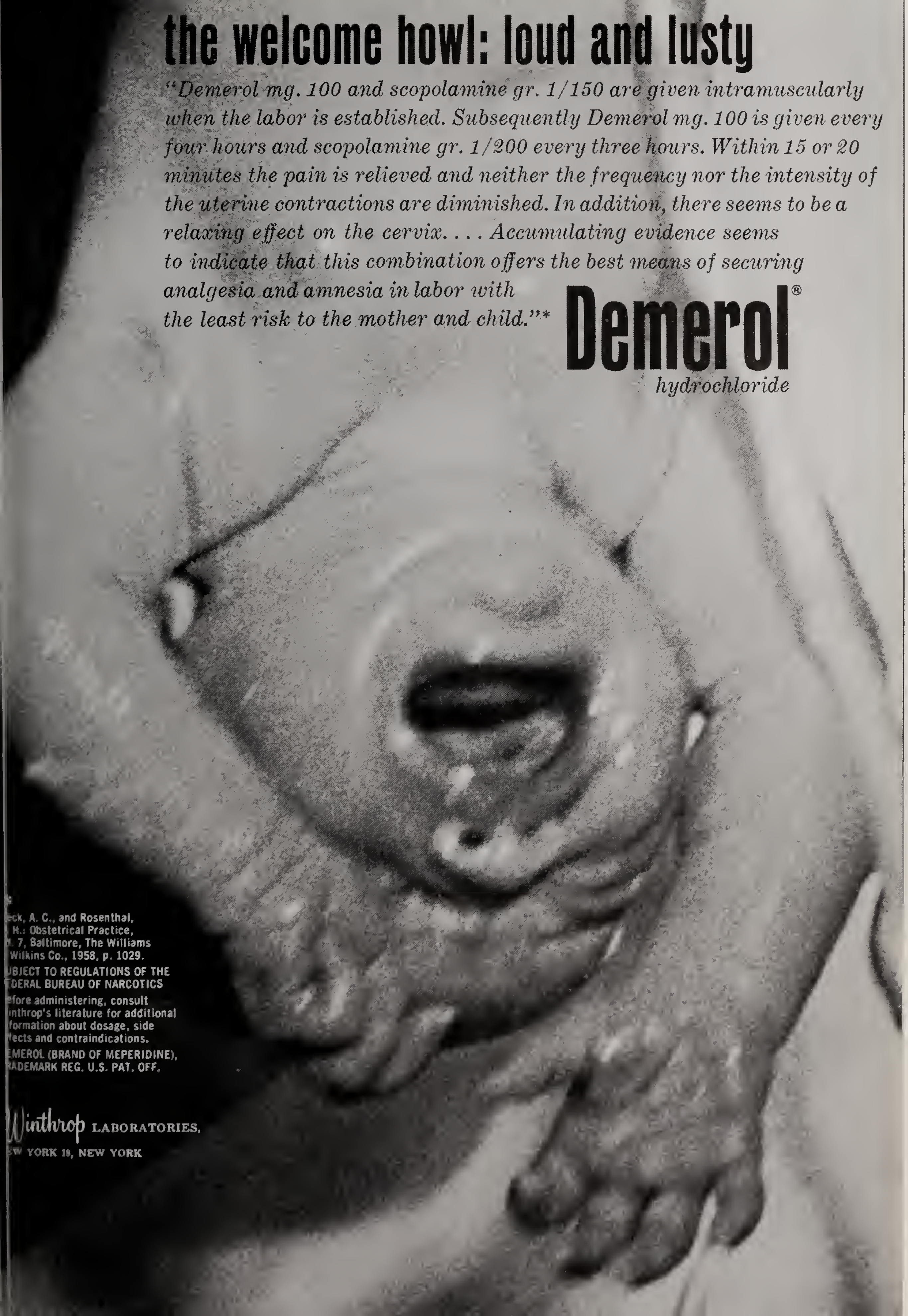
For full information, see your Squibb Product Reference or Product Brief.

Rautrax-N*

Squibb Standardized Rauwolfia Serpentina Whole Root (Raudixin) and Bendroflumethiazide (*Naturetin) with Potassium Chloride

SQUIBB *Squibb Quality — the Priceless Ingredient*
SQUIBB DIVISION **Olin**

'RAUDIXIN'®, 'RAUTRAX'®, AND 'NATURETIN'® ARE SQUIBB TRADEMARKS.



the welcome howl: loud and lusty

*"Demerol mg. 100 and scopolamine gr. 1/150 are given intramuscularly when the labor is established. Subsequently Demerol mg. 100 is given every four hours and scopolamine gr. 1/200 every three hours. Within 15 or 20 minutes the pain is relieved and neither the frequency nor the intensity of the uterine contractions are diminished. In addition, there seems to be a relaxing effect on the cervix. . . . Accumulating evidence seems to indicate that this combination offers the best means of securing analgesia and amnesia in labor with the least risk to the mother and child."**

Demerol®
hydrochloride

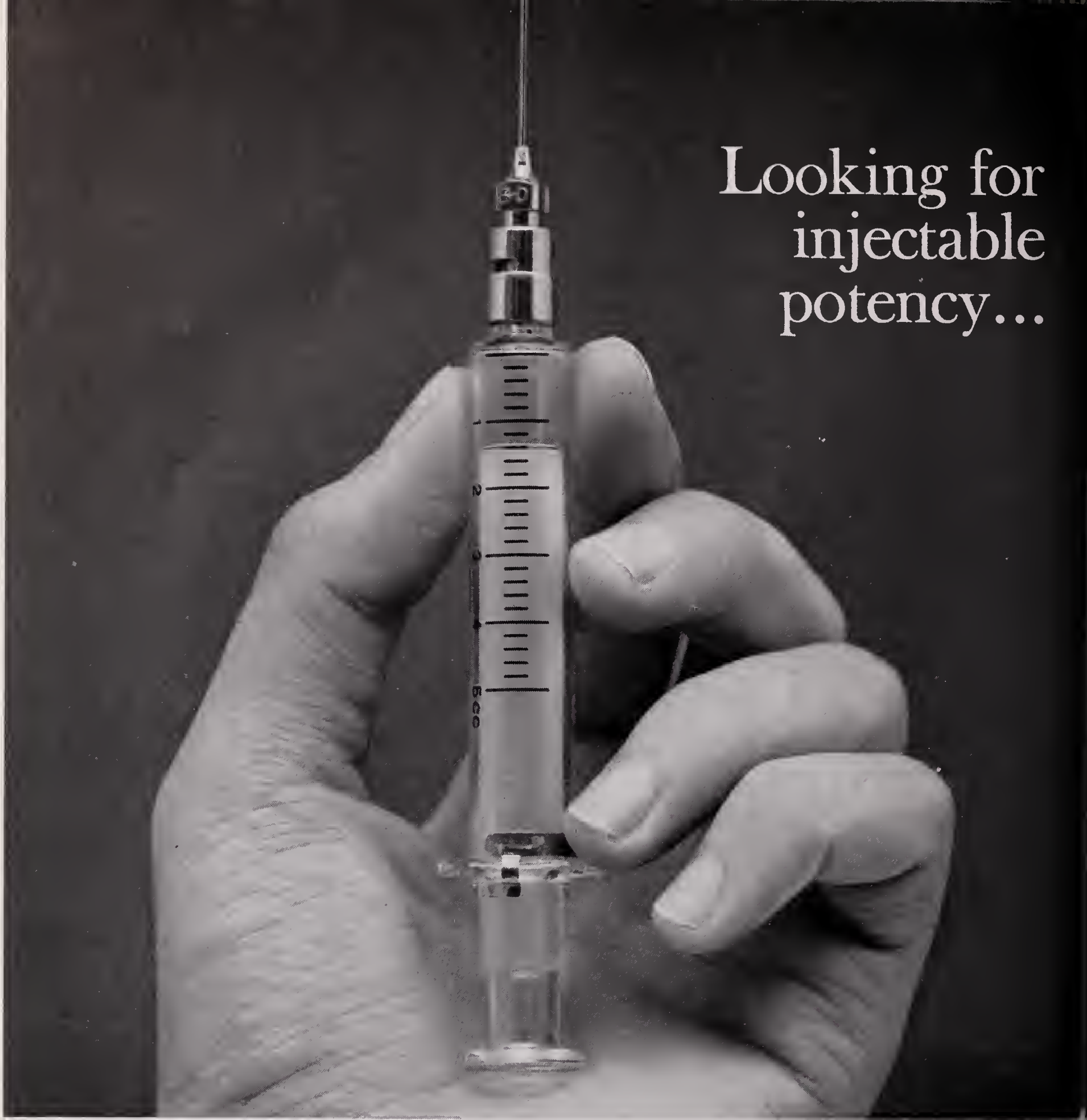
ck, A. C., and Rosenthal,
H.: Obstetrical Practice,
. 7, Baltimore, The Williams
Wilkins Co., 1958, p. 1029.

BJECT TO REGULATIONS OF THE
DERAL BUREAU OF NARCOTICS

fore administering, consult
inthrop's literature for additional
formation about dosage, side
ects and contraindications.

EMEROL (BRAND OF MEPERIDINE),
DEMARK REG. U.S. PAT. OFF.

inthrop LABORATORIES,
YORK 18, NEW YORK


Looking for injectable potency...

FILMTAB®
SURBEX-T® provides therapeutic B-complex with 500 mg. of C

...in
ORAL
form?
100 Tablets
No. 6842
Filmtab®
SURBEX-T®
Abbott's
High-Potency
Vitamin B
Complex with
Vitamin C.
ABBOTT

Patients receive replenishment in the easiest possible manner when the water soluble vitamins are depleted, or demands are increased.

Each Filmtab® Surbex-T represents:

Thiamine Mononitrate (B_1)	15 mg.
Riboflavin (B_2)	10 mg.
Nicotinamide	100 mg.
Pyridoxine Hydrochloride	5 mg.
Cobalamin (Vitamin B_{12})	4 mcg.
Calcium Pantothenate (as calcium pantothenate racemic)	20 mg.
Ascorbic Acid (C) (as sodium ascorbate)	500 mg.
Desiccated Liver, N.F.	75 mg.
Liver Fraction 2, N.F.	75 mg.

...and when needs are more moderate, SUR-BEX® with C, Abbott's improved B-complex formula with 250 mg. of C.

ABBOTT

210270

Filmtab—Film-sealed tablets, Abbott: U.S. Pat No. 2,881,085

MEDICAL ANNALS
OF THE DISTRICT OF COLUMBIA
Editorial and Business Offices: 1718 M Street, N.W., Washington 6, D. C.

Editor
Wallace M. Yater, M.D.

Managing Editor
George W. Cooley

Assistant Editor
A. Louise Eckburg

EDITORIAL BOARD
Frederic G. Burke, M.D.
I. Phillips Frohman, M.D.
Winfred Overholser, M.D.
Thomas M. Peery, M.D.
Herbert P. Ramsey, M.D.
George E. Schreiner, M.D.
Donald Stubbs, M.D.
Charles Stanley White, M.D.

CONSULTING EDITORS
Irving B. Brick, M.D.
Professor of Medicine,
Georgetown University School of Medicine

Captain Thomas E. Cone, Jr., MC, USN
Chief, Pediatric Service, United States Naval Hospital

W. Montague Cobb, M.D.
Professor of Anatomy
Howard University College of Medicine

Vernon Knight, M.D.
Clinical Director, National Institute of Allergy and Infectious Diseases, National Institutes of Health

Walter Kurland, M.D.
Admitting-Personnel Physician,
Veterans Administration Hospital

Colonel Conn L. Milburn, Jr., MC, USA
Director, Walter Reed Army Institute of Research, Walter Reed Army Medical Center

Alvin E. Parrish, M.D.
Associate Professor of Medicine, and Associate Dean,
George Washington University School of Medicine

Colonel Frank M. Townsend, MC, USAF
Director, Armed Forces Institute of Pathology

ethically promoted . . . .

COOK PRODUCTS

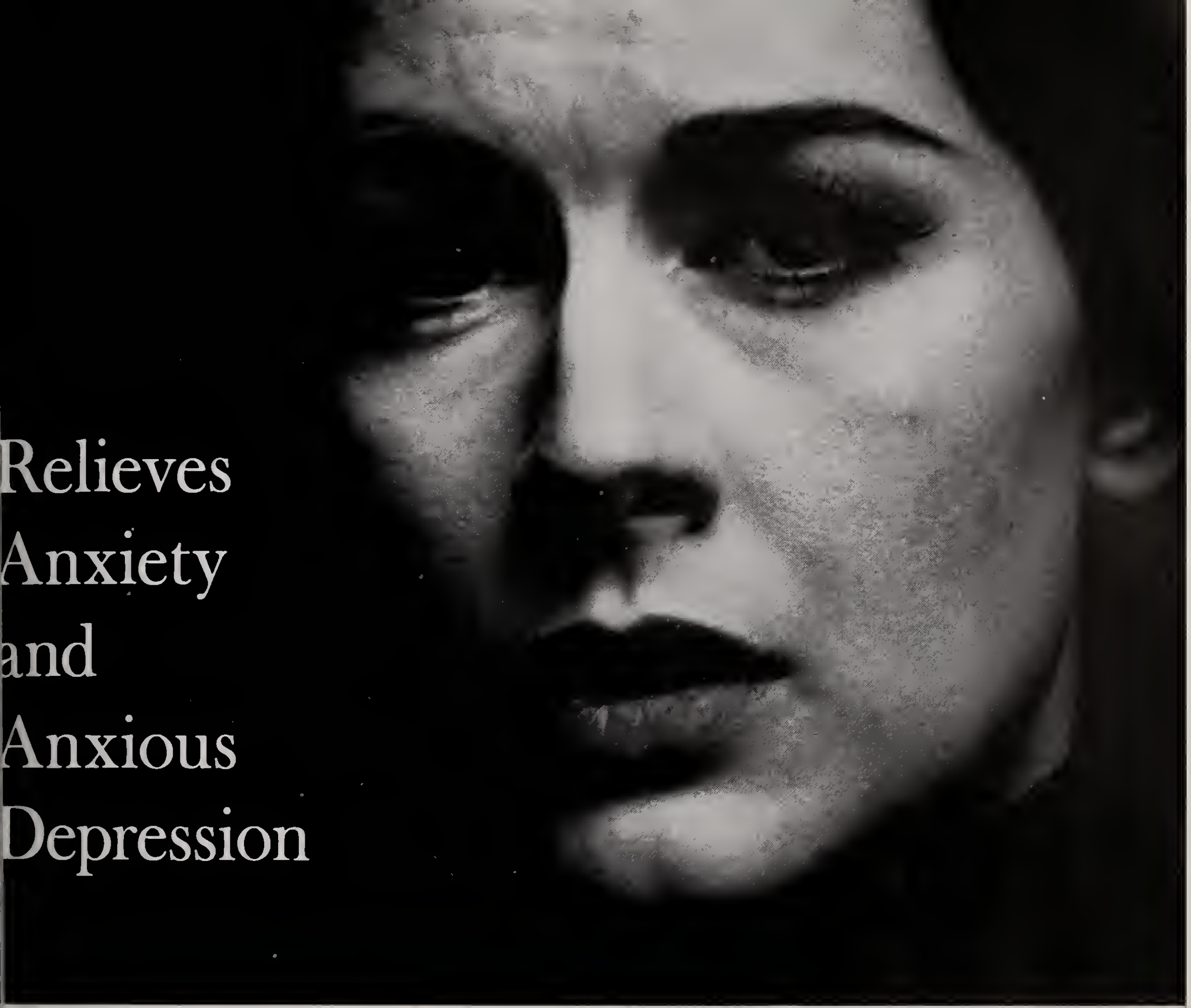
. . . . reasonably priced

NEW—for your next detail on COOK PRODUCTS:

FERROCETTES
IRON WITH ASCORBIC ACID IN
CHEWABLE TABLET FORM

NAUSERTS
A SUPPOSITORY FOR CONTROL OF
NAUSEA AND VOMITING IN CHILDREN

E. K. Cook & Company, Inc. **Bethesda, Maryland**



e outstanding effectiveness and record of safety with which
iltown relieves anxiety and anxious depression—the type of
pression in which either tension or nervousness or insomnia
a prominent symptom — has been clinically authenticated
ne and again during the past seven years. This, undoubt-
ly, is one reason why physicians still prescribe meprobamate
re often than any other tranquilizer in the world.

Miltown®

meprobamate (Wallace)

Usual dosage: One or two 400 mg. tablets t.i.d.
Supplied: 400 mg. scored tablets, 200 mg. sugar-coated tablets; bottles of 50. Also as MEPROTABS® — 400 mg. *unmarked*, coated tablets; and in *sustained-release* capsules as MEPROSPAN®-400 and MEPROSPAN®-200 (containing respectively 400 mg. and 200 mg. meprobamate).

WALLACE LABORATORIES / *Cranbury, N. J.*

Clinically proven in over 750 published studies

1 Acts dependably — without causing ataxia or altering sexual function

2 Does not produce Parkinson-like symptoms or liver damage

3 Does not muddle the mind or impair physical activity

7381

ESTABLISHED 1873 WOMEN ASSISTANTS

In Washington and Suburbs

CALL COLUMBIA 5-7023
(Six Trunk Lines)

The S. H. Hines Company

Funeral Home

2901-03-05-07 FOURTEENTH STREET N.W.
Northeast corner Harvard and 14th Streets

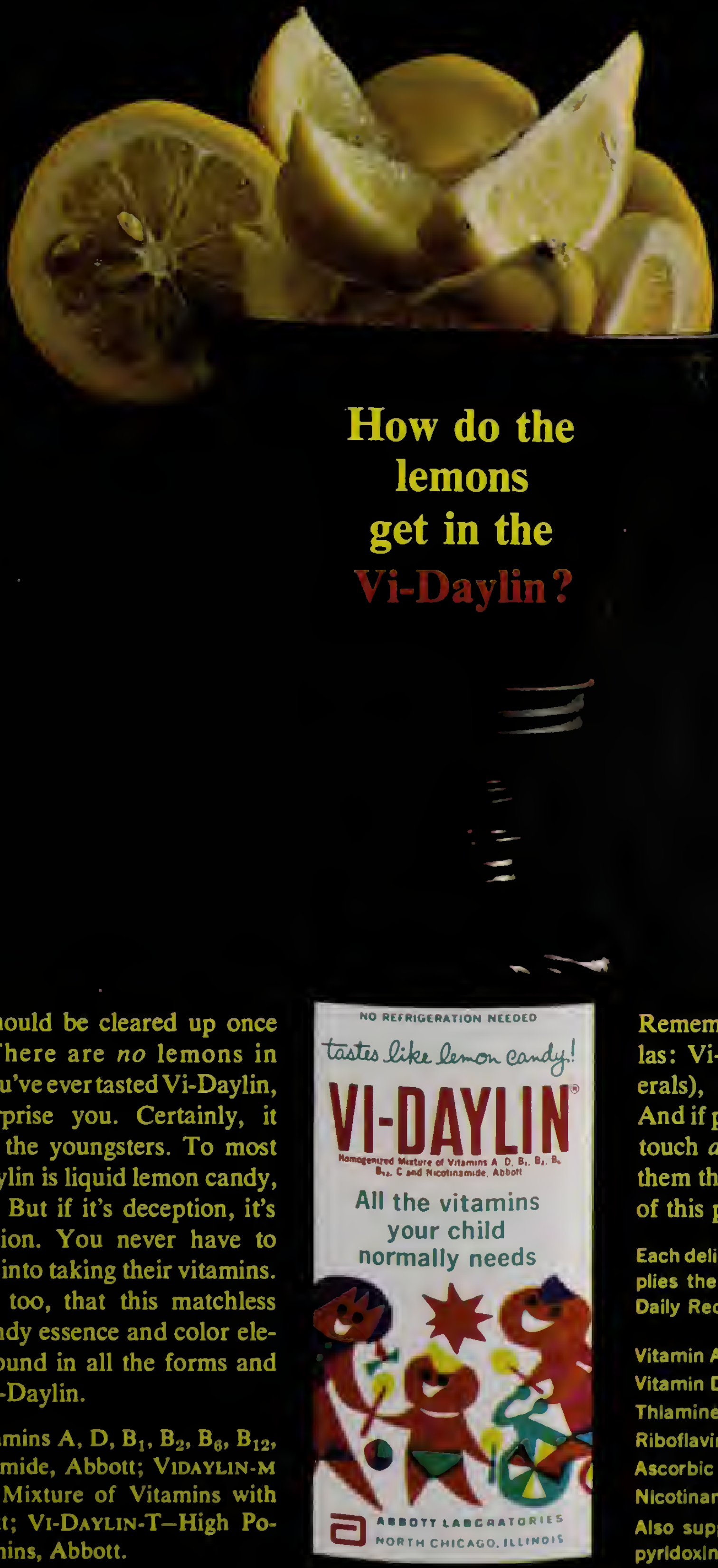
W. R. FRANK HINES
President and General Manager

MODERN AIR-CONDITIONED ROOMS WITH CHAPEL, PIPE ORGAN AND REPOSING ROOMS ARRANGED TO MEET EVERY REQUIREMENT AT NO ADDITIONAL CHARGE. CREMATIONS.

No forfeiture of VETERAN'S BURIAL ALLOWANCE
THE EXPENSE IS A MATTER OF YOUR OWN DESIRE

No Branch Establishments
Convenient parking facilities adjoining Funeral Home

How do the lemons get in the Vi-Daylin?


NO REFRIGERATION NEEDED
tastes like lemon candy!
VI-DAYLIN®
Homogenized Mixture of Vitamins A, D, B₁, B₂, B₆, B₁₂, C and Nicotinamide, Abbott
All the vitamins your child normally needs
ABBOTT LABORATORIES
NORTH CHICAGO, ILLINOIS

Perhaps this should be cleared up once and for all. There are *no* lemons in Vi-Daylin. If you've ever tasted Vi-Daylin, this might surprise you. Certainly, it would surprise the youngsters. To most of them, Vi-Daylin is liquid lemon candy, and that's *that*. But if it's deception, it's sensible deception. You never have to badger the kids into taking their vitamins. Nice to know, too, that this matchless matching of candy essence and color elegance can be found in all the forms and formulas of Vi-Daylin.

VI-DAYLIN—Vitamins A, D, B_1, B_2, B_6, B_{12}, C, and Nicotinamide, Abbott; VIDAYLIN-M—Homogenized Mixture of Vitamins with Minerals, Abbott; VI-DAYLIN-T—High Potency Multivitamins, Abbott.

Remember, there are *three* liquid formulas: Vi-Daylin, ViDaylin-M® (with minerals), and ViDaylin-T® (therapeutic). And if patients get a little owlly and won't touch *anything* in a spoon, you can give them the new Chewable (please see back of this page).

Each delicious, 5-cc. teaspoonful of Vi-Daylin supplies the following proportions of the Minimum Daily Requirements of:

		MDR (Children)	MDR (Infants)
Vitamin A	0.9 mg. (3000 units)	1	2
Vitamin D	10 mcg. (400 units)	1	1
Thiamine HCl (B_1)	1.5 mg.	2	6
Riboflavin (B_2)	1.2 mg.	1⅓	2
Ascorbic Acid (C)	50 mg.	2½	5
Nicotinamide	10 mg.	1⅓	2

Also supplies cyanocobalamin (B_{12}) 3 mcg. and pyridoxine Hydrochloride 1 mg.

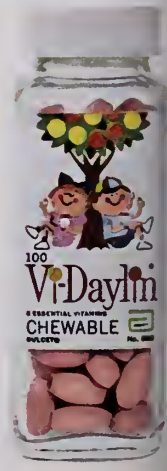
Abbott Laboratories
North Chicago, Illnois

Gentlemen,

My family enjoys your chewable vitimans. It seems like we can not get enough of your vitimans. My sister enjoys your vitimans so much that she ask for more but cannot have no more. I like them because my mother doesnot have to worry about scolding us when taking it. Its good because you don't have no worries about something falling on the floor. If you kept on making these vitimans all the worlds children would be happy again. Now I would like to know whether I may have any information on the Middle West. You see my class and I are studying it. So if the information can be given I thank you very much.

"...all the worlds children would be happy again."

(an unsolicited testimonial from an actual letter)



ABBOTT

NEW!

DECHOLIN-BB®

COUNTERACTS 3 COMMON CAUSES
in functional G.I. disturbances
related to hepatobiliary dysfunction

TENSION	SPASM	STASIS
butabarbital sodium (Warning: may be habit-forming) 15 mg. (¼ gr.)	belladonna extract 10 mg. (⅙ gr.)	dehydrocholic acid, AMES 250 mg. (3¾ gr.)

Available: Bottles of 100 tablets.

for **spasm** and **stasis**

DECHOLIN® WITH BELLADONNA

belladonna extract, 10 mg. (⅙ gr.)
dehydrocholic acid, AMES, 250 mg. (3¾ gr.)

for **stasis** alone

DECHOLIN®

dehydrocholic acid, AMES, 250 mg. (3¾ gr.)

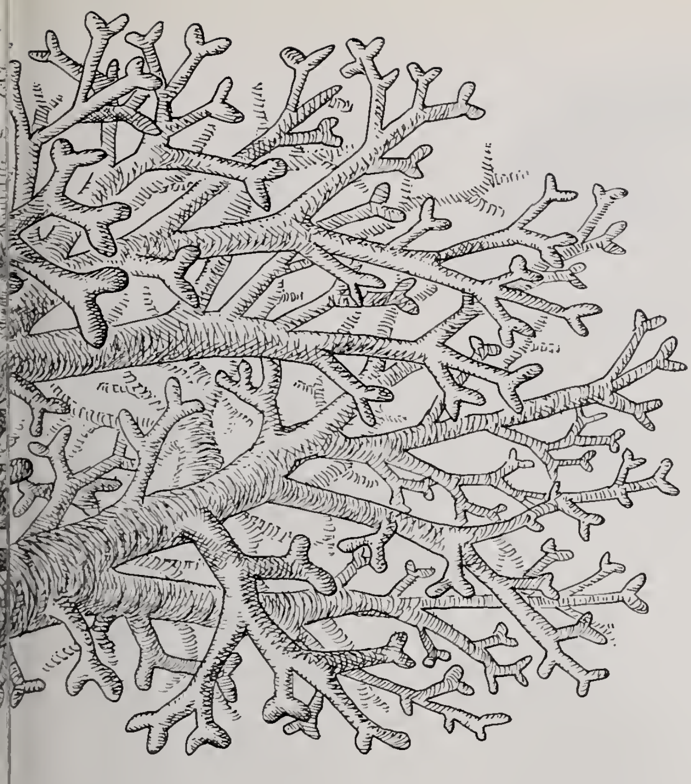
Available: Bottles of 100 and 500 tablets.

Average Adult Dose—DECHOLIN-BB, DECHOLIN with Belladonna, and DECHOLIN—1 or, if necessary, 2 tablets three times daily.
Contraindications: Biliary tract obstruction, acute hepatitis, and (DECHOLIN with Belladonna and DECHOLIN-BB) glaucoma or prostatic hypertrophy. 19562

AMES
COMPANY, INC
Elkhart • Indiana
Toronto • Canada

AMES

gratifying
relief
in bronchial
asthma



unsurpassed for total patient benefits

Aristocort®

Triamcinolone Lederle

With ARISTOCORT, asthmatic patients obtain sustained relief of wheezing, dyspnea, and spasmodic coughing. It is of particular value in ameliorating severe attacks that may have serious sequelae. With ARISTOCORT, many patients who might otherwise be invalids are able to continue their customary livelihoods or maintain their regular household activities. Yet this symptomatic relief is not often accompanied by the hormonal collateral effects —sodium retention, edema, emotional disturbance, insomnia, voracious appetite— that so often have been a deterrent to steroid therapy.

SUPPLIED: Scored tablets (three strengths), syrup and parenteral. Request complete information on indications, dosage, precautions and contraindications from your Lederle representative, or write to Medical Advisory Department.

Lederle

LEDERLE LABORATORIES
A Division of
American Cyanamid Company
Pearl River, New York

In
intestinal
"grippe"

prompt
4 way
check of
diarrhea

- Curbs excessive peristalsis
- Adsorbs toxins and gases
- Soothes inflamed mucosa
- Provides intestinal antisepsis

POMALIN

TRADEMARK

Liquid

EFFECTIVE ANTIDIARRHEAL

FORMULA: *Each 15 cc. (tablespoon) contains:*

Sulfaguanidine U.S.P.	2 Gm.
Pectin N.F.	225 mg.
Kaolin	3 Gm.
Opium tincture U.S.P.	0.08 cc.

(equivalent to 2 cc. paregoric)

DOSAGE: Adults: Initially 1 or 2 tablespoons from four to six times daily, or 1 or 2 teaspoons after each loose bowel movement; reduce dosage as diarrhea subsides.

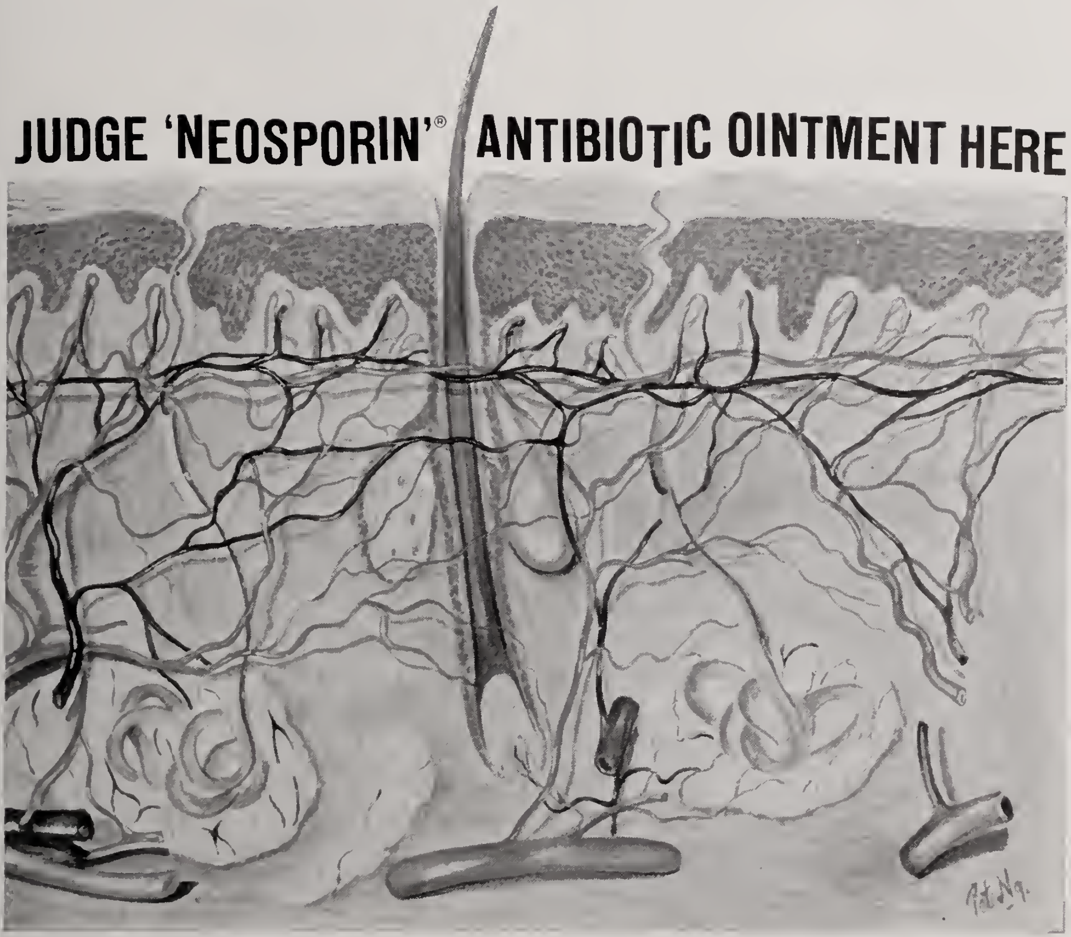
Children: ½ teaspoon (=2.5 cc.) per 15 lb. of body weight every four hours day and night until stools are reduced to five daily, then every eight hours for three days.

SUPPLIED: *Bottles of 16 fl. oz. (raspberry flavor, pink color)*
Exempt Narcotic. Available on Prescription Only.

Winthrop
LABORATORIES
New York 18, N. Y.

Before prescribing be sure to consult Winthrop's literature for additional information about dosage, possible side effects and contraindications.

JUDGE 'NEOSPORIN'® ANTIBIOTIC OINTMENT HERE



Results on SKIN are the true test of a topical anti-infection agent. Because no *in vitro* test can duplicate a clinical-situation in living skin, clinical use alone proves topical effectiveness. In thousands of cases of bacterial skin infection, consistently good results prove that 'Neosporin' Ointment works where topical efficacy counts—on the patient's skin. Why? The antibiotics diffuse readily from the special petrolatum base since they are insoluble in the petrolatum but readily soluble in tissue fluids.

'Neosporin' Ointment is bland, and rarely sensitizes.

'NEOSPORIN'® BRAND POLYMYXIN B BACITRACIN NEOMYCIN ANTIBIOTIC OINTMENT

Supplied: Tubes of 1 oz., ½ oz. with applicator tip, and ⅛ oz. with ophthalmic tip.

BURROUGHS WELLCOME & CO. (U.S.A.) INC., Tuckahoe, New York

BOOK REVIEWS

Pediatrics, 13th ed. L. Emmett Holt, Jr., M.D., Rustin McIntosh, M.D., and Henry L. Barnett, M.D. Price, $18.00. Pp. 1395, illustrated. New York: Appleton, 1962.

Textbooks have the unhappy quality of being somewhat out of date before publication because of the rate of medical progress in this era. But a soundly grounded work is still a valuable teaching aid, despite this handicap—and, after all, textbooks are addressed to and chiefly used by undergraduate medical students.

This textbook has stood the test of time. The first edition, edited by the senior editor's father, was published in 1896. The present edition is composed of the collective pediatric thinking of a group of distinguished writers, representing the East Coast of the United States, in the main.

On the pro side, the page format has been modernized to allow for easier reading. Notably excellent are the sections on feeding the older infant, on the tonsil-adenoid problem, and on renal diseases. A fairly large section (27 pages) is devoted to emotional disorders.

A major fault is the lack of adequate illustrations in many sections. The reviewer strongly disagrees with recommendation for routine prophylactic antibiotic administration to mothers (and their infants) in the event of ruptured membranes for more than 12 hours prepartum.

Generally, the arrangement of the material covered is logical and easy to follow. The style is pleasing. This book continues to be one of the major teaching aids in pediatrics.

Allan B. Coleman, M.D.

The Ciba Collection of Medical Illustrations, Volume 3. A Compilation of Paintings on the Normal and Pathologic Anatomy of the Digestive System: Part II, Lower Digestive Tract. Prepared by Frank Netter, M.D. Edited by Ernst Oppenheimer, M.D. Price, $15.00. Pp. 243, with 200 illustrations. Summit, N. J.: Ciba, 1962.

This work is written with the collaboration of authorities from several centers in the United States, Great Britain, and an especially outstanding group from the University of Sao Paulo, Brazil. It contains a collection of very clear drawings, familiar to many of us who have received the Ciba Symposia over the years, illustrating in great detail an extremely concise text.

A brief introduction shows the embryologic development of the lower bowel, depicting both normal and abnormal growth of this organ. The anatomy of the abdomen—muscular, skeletal, neurologic, circulatory, as well as that of the viscus itself—is described in detail. Its histology and its radiologic appearance are pictorialized in numerous illustrations and photographs. Numerous normal variations are listed. To one accustomed to the drawings in standard texts, the variety of these illustrations is fascinating.

The physiology of the normal bowel is discussed. A brief section is then devoted to the function of the bowel as altered by drug therapy or surgical manipulations. Another section outlines a number of newer diagnostic procedures, including radioactive absorption tests of small bowel function.

The British group of collaborators has contributed an outstandingly concise summary of congenital and mechanical disturbances of the bowel. The Brazilian group presents a large section devoted to allergic, psychogenic, bacterial and parasitic involvement. Finally, there is an illuminating section describing the techniques of a number of standard surgical procedures.

It is instructive to see how an imaginative artist is able to pictorialize etiologic factors and clinical signs and symptoms rather than to verbalize them.

This is an excellent reference text that combines information under one cover which would ordinarily require a number of separate books.

Erwin Steinman, M.D.

Treatment of Injuries to Athletes. Don H. O'Donoghue, M.D. Price, $18.50. Pp. 649, with 457 illustrations. Philadelphia: Saunders, 1962.

The treatment of athletic injuries is a timely subject, in view of the increased national interest in physical conditioning. This is reflected in the number of postgraduate seminars for physicians. Another manifestation of the heightened interest is the extension of organized athletics to involve a major portion of the Nation's youth in college and even secondary schools. Intramural competition makes it possible for many more youths to participate. Unfortunately, in spite of preventive measures, a natural consequence of athletic participation is injuries. This book represents an enlightened approach to treatment. Detection of the nature and degree of the injury is the outstanding consideration, according to the author. This determination is best done immediately after the injury is sustained.

The text is conveniently divided into three parts. The first part deals with the prevention of injuries, stressing conditioning and equipment. The second part discusses the general principles of treatment. The treatment of injuries in specific areas is the third section. Each chapter is devoted to a region of the body.

The author's style makes for easy reading. The photographs and line drawings are of exceptional quality and ably amplify the text. The chapter on "Injuries of the Knee" deserves special attention. Dr. O'Donoghue's experience with surgical management of ligamentous injuries of the knee offers a sound and proven approach to treatment of this often challenging problem.

This book should be helpful to the physician who treats the occasional athletic injury, and is invaluable to one who is responsible for the care of large numbers of athletes.

Charles H. Epps, Jr., M.D.

SAUNDERS BOOKS

Valuable to the Physician

New (13th) Edition!

Davidsohn and Wells—

Todd-Sanford Clinical Diagnosis by Laboratory Methods

A Standard Guide and Advisor to 3 Generations of Physicians in the Intricacies of Clinical Laboratory Diagnosis. Now in a new up-to-date edition, this classic work tells you how to perform every possible clinical test. Step-by-step you are told what to do, when and how to do it — with increased emphasis on interpretation and evaluation of results. New material covers: *immune mechanisms and immunochemistry of red cells, leukocytes and platelets — application of isotopology in diagnosis—tests for hepatic function — etc.* Hundreds of illustrations amplify the text.

Edited by ISRAEL DAVIDSOHN, M.D., F.A.C.P., Chairman of Pathology, Chicago Medical School, Director of Pathology, Mt. Sinai Hospital and Director of Research, Mt. Sinai Medical Research Foundation, Chicago, and BENJAMIN B. WELLS, M.D., Ph.D., F.A.C.P., Dean, California College of Medicine, Los Angeles. 1020 pages, 6" x 9¼", over 1000 illustrations on 450 figures, 200 in color. About $15.50. *New (13th) Edition—Just Ready!*

New (3rd) Edition!

Wolff—

Electrocardiography

Tells You Why the Normal Electrocardiograph Pattern Looks Like it Does and Why Various Cardiac Disturbances Produce Abnormal Tracings. Dr. Wolff shows you how to utilize this information to establish diagnoses — without relying primarily on memorization of examples. He points out how to interpret both classical patterns and unusual aberrations which may complicate diagnosis. New diagnostic material is included on: *Left bundle branch block masquerading as right bundle branch block in some cases of infarction—ECG in deranged electrolyte patterns—Hyperkalemia—Adrenal hyperplasia with adrenocortical failure—Number of complex arrhythmias.*

By LOUIS WOLFF, M.D., Visiting Physician, Consultant in Cardiology and Head of the Cardiographic Laboratories, Beth Israel Hospital; Clinical Professor of Medicine, Harvard Medical School. 351 pages, 6½" x 9¾", 224 illustrations. $8.50. *New (3rd) Edition—Just Ready!*

A New Book!

Parsons and Sommers—

Gynecology

Clinical Advice on Managing Today's Gynecologic Problems

An experienced gynecologist and a skilled pathologist have uniquely combined their talent and knowledge to produce a remarkable text that describes, explains and pictures the diagnosis and management of gynecologic disorders as they occur in each period of growth and aging—from infancy through the postmenopausal era.

Mechanisms of disease in women are fully described: how each disorder starts, spreads and affects surrounding structures—how it produces signs and symptoms which can be evaluated and differentiated—how the disorder can be treated in light of present knowledge. Full recognition is given to the altered significance and differing management of the same problem—such as *abnormal bleeding, hormone imbalance, tumors and growths* — during the various progressive ages of women. You'll find valuable coverage of: *treatment of congenital defects found at birth and in infancy—treatment of amenorrhea—habitual abortion—tumors complicating pregnancy—endometriosis—cancer of the breast—sexual precocity—premenstrual tension—etc.*

By LANGDON PARSONS, M.D., Professor of Obstetrics and Gynecology, Boston University School of Medicine; Chief, of Gynecology, Massachusetts Memorial Hospital; and SHELDON C. SOMMERS, M.D., Pathologist, Scripps Memorial Hospital; Clinical Professor of Pathology, University of Southern California School of Medicine, Los Angeles. 1250 pages, 6½" x 9¾", 488 illustrations. $20.00. *New!*

To Order Mail Coupon Below!

W. B. SAUNDERS COMPANY

West Washington Square Philadelphia 5

Please send and bill me:

☐ Parsons & Sommers' Gynecology, $20.00

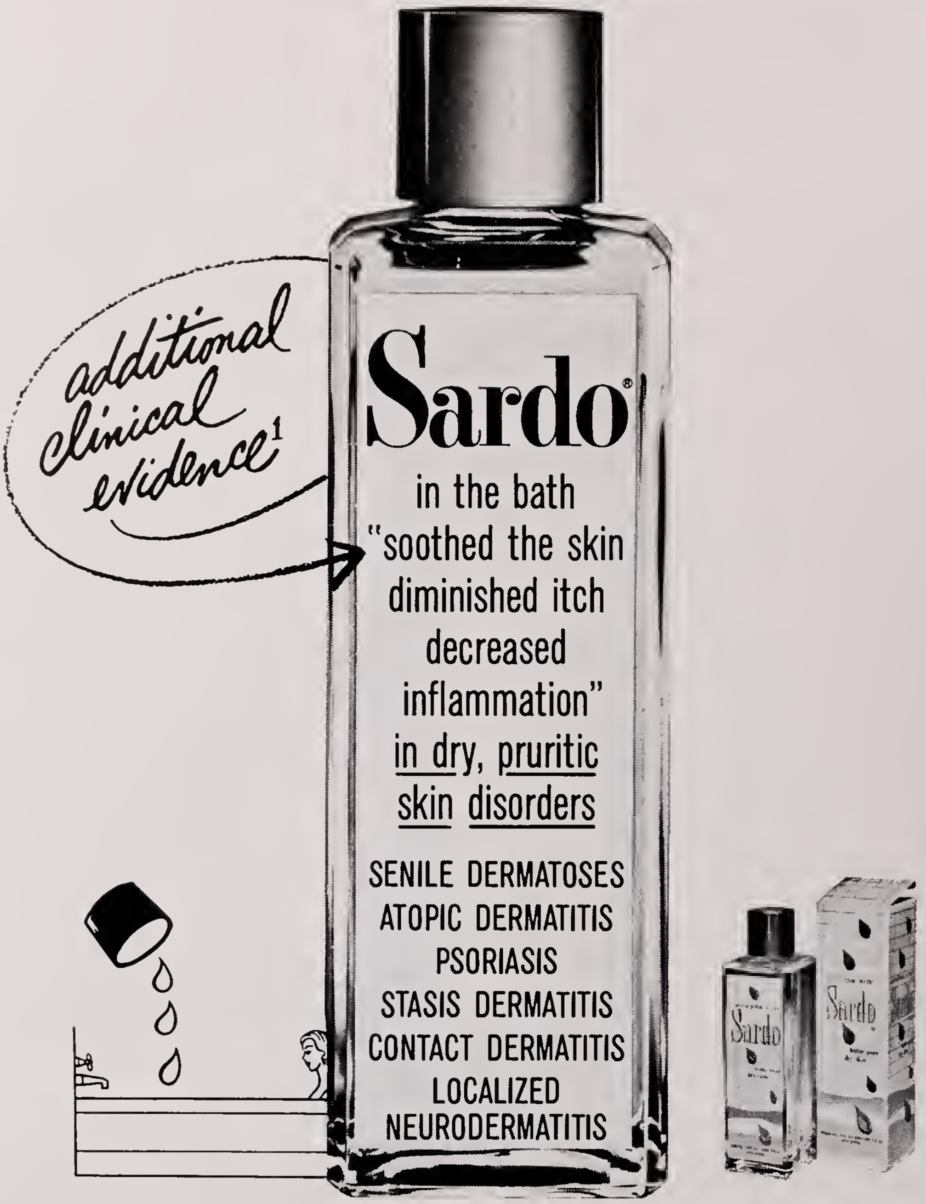
☐ Davidsohn & Wells' Clinical Lab Diagnosis, about $15.50

☐ Wolff's Electrocardiography, $8.50.

Name ....

Address ....

..................................SJG 10-62


additional clinical evidence¹
Sardo®
in the bath
"soothed the skin
diminished itch
decreased
inflammation"
in dry, pruritic
skin disorders
SENILE DERMATOSES
ATOPIC DERMATITIS
PSORIASIS
STASIS DERMATITIS
CONTACT DERMATITIS
LOCALIZED
NEURODERMATITIS
Sardo
Sardo

BENEFICIAL RESULTS were obtained with **SARDO** in the bath in 122 of 135 patients (90%) with dry, itchy skin conditions, in most cases with beneficial effect "after the first bath." Dryness was allayed in all cases, and associated itching "either completely relieved or greatly improved." No irritation or sensitization was observed.

This new study corroborated others[2-4] showing that SARDO helps re-establish the normal physiologic lipid-aqueous skin balance.

Pleasant, easy-to-use SARDO releases millions of microfine water-dispersible globules* in the bath. Bottles of 4, 8 and 16 oz.

©1962 *Patent Pending T.M.

SAMPLES and literature available from...

SARDEAU, INC.

75 East 55th Street, New York 22, N. Y.

1. Borota, A., and Grinell, R. N.: J. Amer. Geriatrics Soc., 10:413, 1962.
2. Spoor, H. J.: N.Y. State J.M. 58:3292, 1958.
3. Lubowe, I. I.: Western Med. 1:45, 1960.
4. Weissberg, G.: Clin. Med. 7:1161, 1960.

asthma attack averted
. . . in minutes

patient protected
. . . for hours

Nephenalin®
(the dual-action anti-asthmatic tablet)

. . . works with nebulizer speed—provides four-hour protection

One NEPHENALIN tablet provides: *air in a hurry*—through sublingual isoproterenol HCl, 10 mg. *air for hours*—through theophylline, 2 gr.; ephedrine, ⅜ gr.; phenobarbital, ⅛ gr.
Dosage: Hold one NEPHENALIN tablet under the tongue for five minutes to abort the asthmatic attack promptly. Then swallow the tablet core for four full hours' protection against further attack. Only one tablet should be taken every four hours. No more than five tablets in 24 hours.
Supplied: Bottles of 50 tablets. For children: NEPHENALIN Pediatric, bottles of 50 tablets.
Caution: Do not administer NEPHENALIN with epinephrine. The two medications may be alternated at 4-hour intervals. NEPHENALIN should be administered with caution to patients with hyperthyroidism, acute coronary disease, cardiac asthma, limited cardiac reserve, acute myocardial damage, and to those hypersensitive to sympathomimetic amines. Phenobarbital may be habit forming. THOS. LEEMING & CO., INC., New York 17, N.Y.

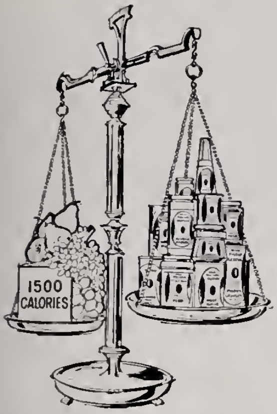
Trocinate® Brand of Thiphenamil HCl.

FOR DIVERTICULITIS, MUCUS COLITIS,
IRRITATIVE DIARRHEA, IRRITATIVE URETERITIS,
BLADDER SPASM

Trocinate is a musculotropic antispasmodic with no appreciable anticholinergic action. It relieves spasms of the lower bowel and genito-urinary tract by direct action on the contractile mechanism of smooth muscles. The absence of any appreciable action on the autonomic nervous system eliminates the usual side-effects. It may be safely used in glaucoma. Each tablet contains 100 mgs. Trocinate HCl.
USUAL DOSAGE: 2 tablets, 4 times a day. Maintenance dosage is frequently lower.

Dispensed in bottles of 40 and 250 tablets.

WM. P. POYTHRESS & COMPANY, INC., RICHMOND, VIRGINIA
Manufacturers of ethical pharmaceuticals since 1856



How to get patients to follow your directions for weight control... easily

60 DELICIOUS FOODS THAT CUT CALORIES, FAT AND CARBOHYDRATES!

How often do you sit across the desk from a patient whose problem is overweight, and wonder whether the directions you give for diet will be followed accurately—or at all?

A pleasant and efficient solution to this problem is to recommend the new Mott's Figure Control Foods. This line of over 60 different items has been developed through the latest scientific knowledge in the field of nutrition—and provides foods lower in calories by an average of 50%. Figure Control Foods take the guesswork out of menu-planning. Calorie cutting can be made pleasant and accurate, while eating normal-size portions of the kinds of food people enjoy every day at breakfast, lunch and dinner.

Low carbohydrate, low fat: Meat products have most of the hard fats removed (these are the saturated type) in a way that cannot be done at home. Sauces and dressings are prepared with a high proportion of non-fat milk solids, vegetable colloids; all are delicious and appetizing. Fruits, juices, desserts and sauces are prepared with non-caloric sweetener—natural fruit values are intact.

The carbohydrate, protein and fat content appears on each label, along with calorie counts. Useful for diabetics, too.

Easy medical tool for doctors: No possible dangerous side effects, not even temporary dislocation of meal patterns. Figure Control Foods in supermarkets include: Soups, Meats, Poultry, Sauces, Salad Dressings, Preserves, Syrup, Fruits, Drinks, Desserts, Sweeteners.

New Mott's Figure Control® Foods offer Good Eating at Half the Usual Calories

	Quantity	Figure Control Calories	"Regular" Food Calories
Apple-Grape Drink	½ cup	20	52
Five-Fruit Juice Breakfast Drink	½ cup	20	52
Braised Beef and Vegetables	6½ oz.	184	380
Meat Balls in Brown Gravy	3½ oz.	84	280
Chopped Chicken Livers	1 oz.	31	100
Chicken a la King	3 oz.	72	230
French Style Dressing	1 tbsp.	10½	60
Brown Gravy	1 tbsp.	7	21

	Quantity	Figure Control Calories	"Regular" Food Calories
Applesauce	½ cup	48	90
Fruit Cocktail	½ cup	44	90
Cherry Pie Filling	1 oz.	20	60
Chocolate Topping	1 tbsp.	8	63
Preserves (Peach, Strawberry)	1 tbsp.	9	55
"Maplette" Syrup	1 tbsp.	9	55
Liquid or Powder Sweetener	(to equal 1 tbsp. of sugar)	0	16

MOTT'S FIGURE CONTROL
BEEF SLICES
TOMATO SOUP
LOW CALORIE
PEACHES
VEGETABLE JUICE COCKTAIL
SPAGHETTI SAUCE

Complete menus, recipes, caloric chart available for professional distribution, with weight control guides you can distribute with confidence: all menus meet N.R.C. Recommended Daily Allowances. **Use this handy order form:**

FIGURE CONTROL FOODS
Duffy-Mott Company
370 Lexington Avenue
New York 17, New York

Please send____free copies of YOUR WEIGHT CONTROL PLAN for use with patients.

Dr.____________________

Address:____________________

City:__________Zone:____State:____

NEW **SPECIAL COUGH FORMULA**
for Children

Pediacof

Trademark

SOOTHING DECONGESTANT AND EXPECTORANT

Each teaspoon (5 cc.) contains:

Codeine phosphate	5.0 mg.
Neo-Synephrine® hydrochloride (brand of phenylephrine hydrochloride)	2.5 mg.
Chlorpheniramine maleate	0.75 mg.
Potassium iodide	75.0 mg.

Bright red, pleasant tasting, raspberry flavored syrup

Dosage:

Children from 6 months to 1 year, 1/4 teaspoon; 1 to 3 years, 1/2 to 1 teaspoon; 3 to 6 years, 1 to 2 teaspoons; 6 to 12 years, 2 teaspoons. Every four to six hours as needed.

How Supplied:
Bottles of 16 fl. oz.

Exempt Narcotic

Winthrop
LABORATORIES
New York 18, N Y

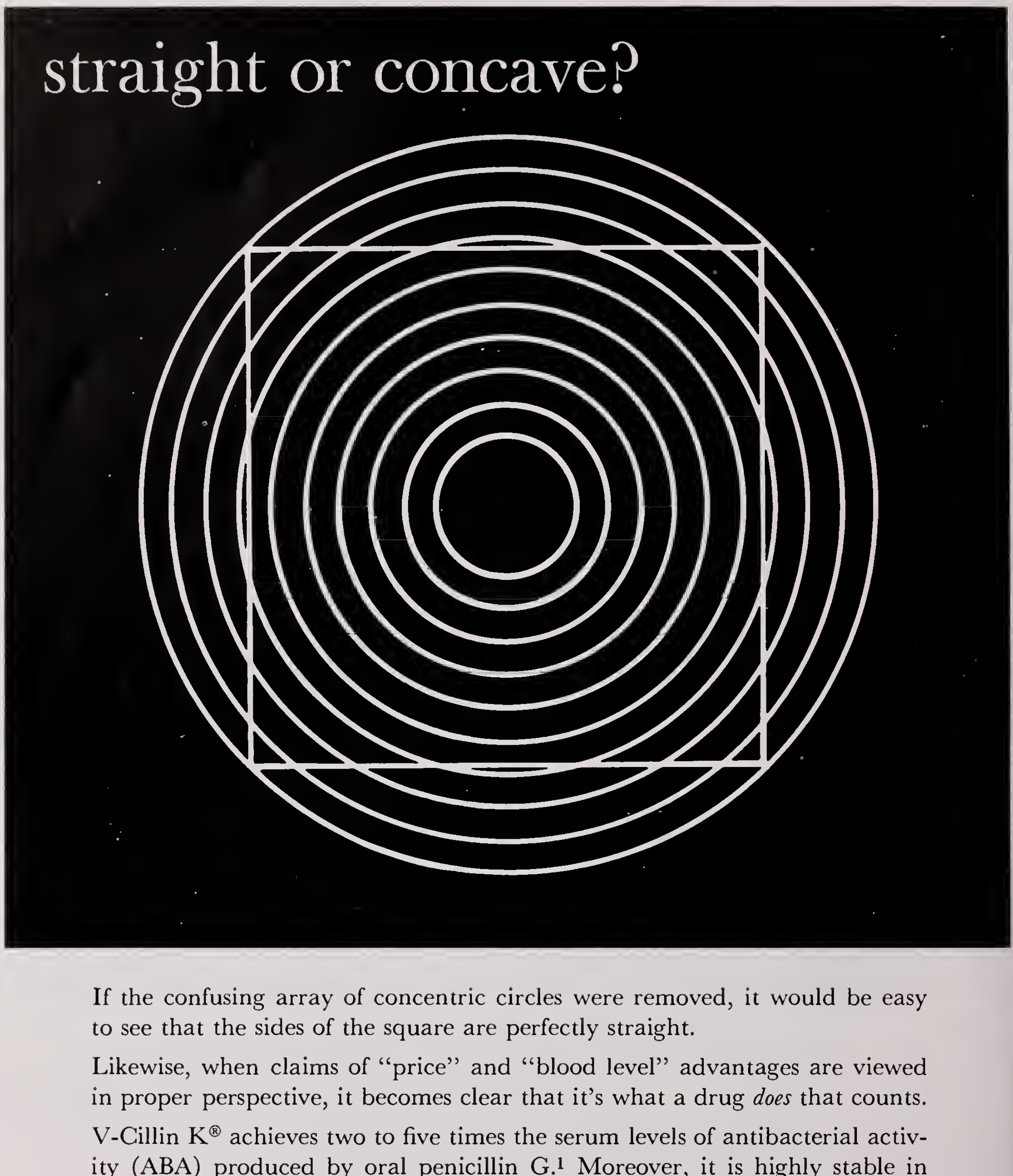
Before prescribing be sure to consult Winthrop's literature for additional information about dosage, possible side effects and contraindications.

WHEN
HE EATS TOO
HIGH ON THE
HOG...

ENTOZYME® helps your gallbladder patient digest fat

The gallbladder patient who "can't resist" rich, succulent, greasy foods must often pay for his gastronomical indiscretions with the discomforts of fat-induced indigestion. However, these unpleasant aftereffects can frequently be relieved or prevented with Entozyme, a natural digestive supplement. Six tablets, the usual daily dose, will digest 60 gm. of fat or more. That's 50 to 90 per cent of an adult's normal daily intake. Bile salts stimulate the flow of bile and enhance the lipolytic activity both of Entozyme's Pancreatin and the patient's own lipase. Working together, Bile Salts and Pancreatin greatly aid the emulsification and transport of fat. Each enteric-coated Entozyme tablet contains Bile Salts (150 mg.) and Pancreatin, N.F. (300 mg.). Also 250 mg. of Pepsin, N.F.—enough to digest 8 gm. of protein.

A. H. Robins Company, Inc., Richmond 20, Virginia


straight or concave?

If the confusing array of concentric circles were removed, it would be easy to see that the sides of the square are perfectly straight.

Likewise, when claims of "price" and "blood level" advantages are viewed in proper perspective, it becomes clear that it's what a drug *does* that counts.

V-Cillin K® achieves two to five times the serum levels of antibacterial activity (ABA) produced by oral penicillin G.[1] Moreover, it is highly stable in gastric acid and, therefore, more completely absorbed *even in the presence of food.* Your patient gets more dependable therapy for his money . . . and it's therapy he really needs.

For consistently dependable clinical results
prescribe V-Cillin K in scored tablets of 125 and 250 mg. or V-Cillin K, Pediatric, in 40 and 80-cc.-size packages. Each 5-cc. teaspoonful contains 125 mg. crystalline potassium penicillin V.

V-Cillin K® (potassium phenoxymethyl penicillin, Lilly) (penicillin V potassium)

1. Griffith, R. S.: Antibiotic Med. & Clin. Therapy, 7:129, 1960.

Lilly

233267

This is a reminder advertisement. For adequate information for use, please consult manufacturer's literature. Eli Lilly and Company, Indianapolis 6, Indiana.

MEDICAL ANNALS
of the District of Columbia

October 1962 VOLUME XXXI • NUMBER 10

The Armed Forces Institute of Pathology: 1862–1962

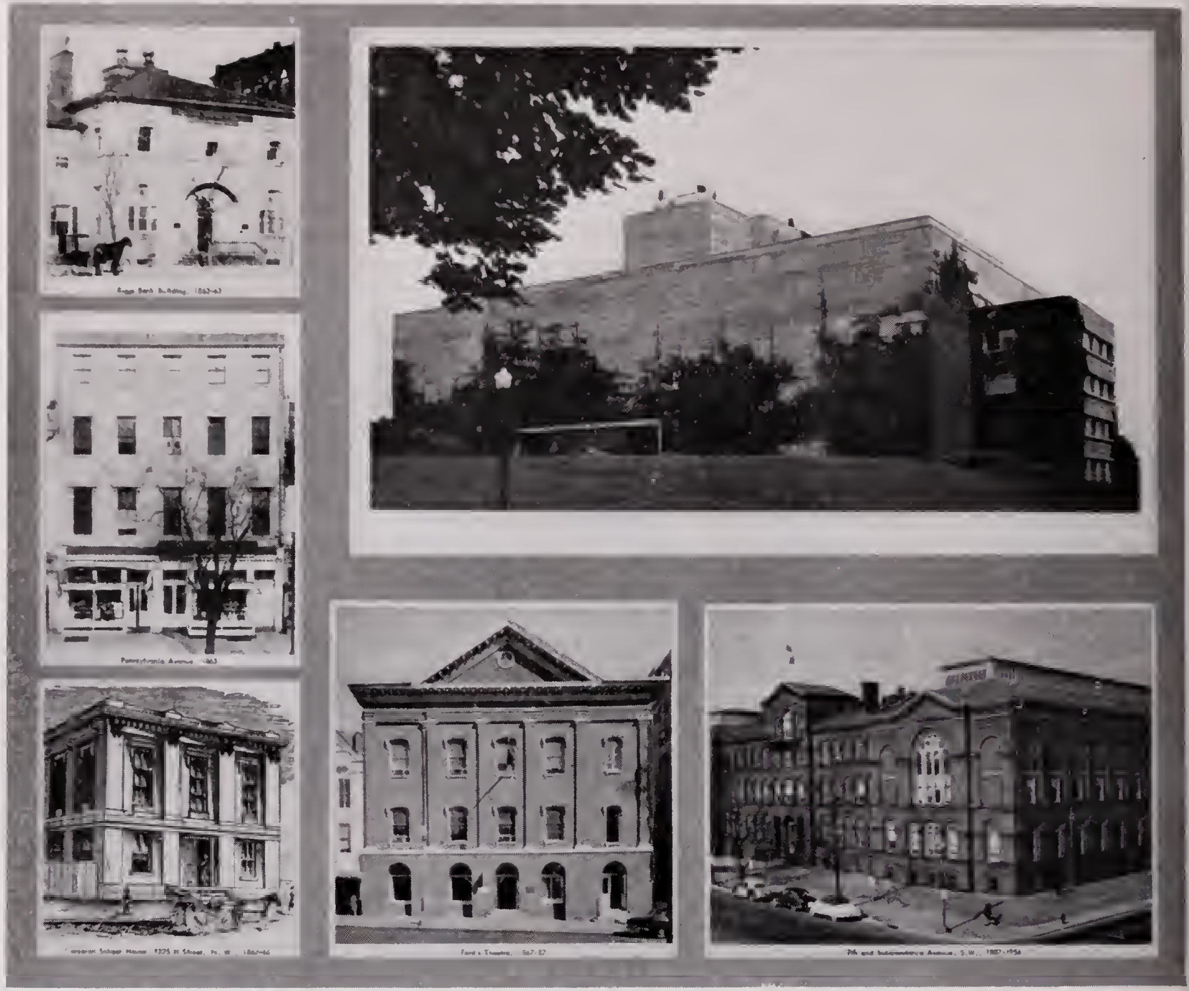
COLONEL FRANK M. TOWNSEND, USAF, MC
Director, Armed Forces Institute of Pathology, Washington

THE YEAR 1962 marks the beginning of the second century of the Armed Forces Institute of Pathology. Originally designated the Army Medical Museum, which in turn was renamed the Army Institute of Pathology in 1945 and the Armed Forces Institute of Pathology in 1949, the AFIP has played a vital role in American medicine from its very beginnings.

Its original mission was to collect specimens from the battlefields of the Civil War, and this material was used to train young physicians assigned to field and hospital units of the Union Army. An additional mission was to prepare a medical and surgical history of the War. This monumental four-volume history was finally completed in 1888. Established by the direction of Surgeon General William Alexander Hammond in May of 1862, activated August 1 of that same year under the direction of Surgeon John Hill Brinton, the Institute has steadily grown with the passage of years. It was at the Museum that Dr. J. J. Woodward first developed photomicrography in this country and introduced the use of aniline dyes for staining tissues. Deputy Surgeon General John S. Billings, Curator of the Museum from 1883 to 1893, laid the groundwork for the diversified Institute of Pathology that we know today. At the same time he brought into being the great library now known as the National Library of Medicine. Major Walter Reed, while Curator from 1893 to 1902, is famed for his work on yellow fever. Major Frederick S. Russell, Curator from 1907 to 1913, was instrumental in the development in the United States of vaccination for typhoid fever for use in the Armed Forces. Colonel William Otway Owen, Curator during World War I, developed an organized system of collecting and processing material from the battlefields of that great conflict that is still in basic use today.

In the 1920's Major George R. Callender introduced modern pathology methods into the Museum and inaugurated the present system of registries. In 1930 these became the American Registry of Pathology, a joint enterprise between the A.F.I.P. and the National Research Council. Colonel James E. Ash, Curator during the period of World War II, was instrumental in the organization of the Institute along its present lines. Brigadier General Raymond O. Dart successfully terminated the long quest to secure adequate quarters, which had begun back in the time of Colonel Owen; and in 1955 the Institute occupied its present facilities, which are located on the grounds of the Walter Reed Army Medical Center.

Previous homes of the Institute have been in the old Riggs Bank building at 15th Street and



HOMES OF THE ARMED FORCES INSTITUTE OF PATHOLOGY

Upper right: Present home on the grounds of Walter Reed Army Medical Center, completed in 1955. Previous homes, beginning upper left, counterclockwise: Old Riggs Bank Building, 1862–63; store building in 1700 block of Pennsylvania Avenue, later in 1863; Corcoran School House, 1863–66; Ford's Theater, 1866–87; and building at Seventh Street and Independence Avenue, S.W., 1887–1955.

Pennsylvania Avenue, Northwest, in 1862-1863, in a store building in the 1700 block of Pennsylvania Avenue later in 1863, at the Corcoran School House on H Street from 1863 to 1866, in Ford's Theater from 1866 to 1887, and in the old red brick building at Seventh Street and Independence Avenue, Southwest, from 1887 to 1955. The first three of these homes have long since disappeared. It is interesting to note, however, that the Columbian Medical College (now the George Washington University School of Medicine) occupied the Corcoran School House when it was vacated by the Museum and still has facilities located on this site.

The Museum activities of the Institute have continued in temporary buildings in the Mall area of downtown Washington. In this 100th year and on the 21st of May, exactly one century after Hammond authorized the formation of the Medical Museum, the Museum has finally begun its move back into the old red brick building vacated by the National Library of Medicine, which moved to new quarters in Bethesda.

During its long history the Institute has always been very much a part of the local medical scene. Throughout its life many members of its staff have served on the faculties of the local medical schools. The Museum played host to the meeting of the American Medical Association that was held in Washington in 1868, and Dr. James Woodward, who became the President of the AMA in 1882, was the first military medical officer to serve in this capacity. There are numerous interesting vignettes associated with the Museum-Institute during this past century. The founding meeting of the Cosmos Club was held in the Museum on December 13, 1878.[1] The first roentgenogram taken in the city of Washington was made on the fourth floor of the Museum in 1896 only six months after Roentgen announced the development of the X-ray. This early use of the X-ray as a diagnostic instrument is vividly detailed in a personal communication from Joseph S. Wall, M.D.,[2] an "externe" of Garfield Memorial Hospital at that time. The admission record of the Hospital carries the dates, names, and diagnosis.

> "On June 10, 1896, a girl of 17 was admitted to the hospital because of a 0.22 calibre penetrating gunshot wound of the hip, accidentally inflicted by her brother.
>
> "It became my duty to accompany the patient in a horse-drawn ambulance to the Army Medical Museum to obtain the services of Dr. William Gray, then an official of the Museum, who was the only one in the city in possession of a Roentgen tube at that early date. After the orderly-driver and myself had struggled up four flights of stairs to Dr. Gray's laboratory, carrying a rather plump young lady on the stretcher, she was exposed to the X-ray for a period of one hour in order to secure a picture showing the location of the bullet.
>
> "After this long seance of exposure to the beneficent rays, a satisfactory plate was secured, even though the tube was activated by a kind of static grindstone! The girl was taken back to the hospital where the bullet was successfully extracted by the attending surgeon, the late Dr. Arthur Snyder, aided by the X-ray findings."

The present-day Institute has a staff of over 600 and is engaged in the broad field of consultation, education, and research in pathology. Its staff publishes over 80 papers annually, and its research program consists of well over 200 separate projects. It is rapidly expanding its mission of geographic pathology, its staff members actively collecting material in the study of disease entities throughout the world. Today it utilizes the techniques of virology, biophysics, biochemistry, histochemistry, immunobiology, and anthropology as basic methodologies for consultation and research. It has a large and active veterinary division devoted to the study of diseases of animals, particularly those that affect our source of foodstuff or are transmissible to man.

The dental activities of the Institute date back to its beginnings. In 1895 the American Dental Association designated the Museum as its laboratory for interesting cases as well as material of historic importance. This was the forerunner of the present system of Registries of the American Registry of Pathology. The Registry of Dental and Oral Pathology is one of the 26 Registries operated by the A.F.I.P. in conjunction with the National Research Council.

The Institute serves as one of the international reference centers for the study of the histologic definition of tumor types, under the auspices of the World Health Organization. It is the home of the Joint Committee on Aviation Pathology, which serves as a mechanism by which pathologists of the military services of the United States, the United Kingdom, and Canada freely exchange information regarding the human factors in aircraft and missile accidents.

The Medical Illustration Service is unique in that, probably for the first time in the history of medicine, all the facets of this invaluable support activity have been gathered in one organization on a scale capable of meeting any requirement in the field of medical visual communications.

The Institute today is a truly "integrated" organization with personnel components of the Army, Navy, Air Force, Veterans Administration, and Public Health Service, as well as a large civilian personnel component of the Defense Department (Army) and other Federal agencies. As a joint agency of the three military departments it is subject to the authority, direction, and control of the Secretary of Defense and is under the "management" control of the Secretary of the Army, with this authority vested in the Surgeon General of the Army. The Board of Governors of the Institute consists of the Surgeons General of the Army, Navy, and Air Force, and they are responsible for the day-to-day policy direction of the Institute on professional and related matters. The Director of the Institute is charged with responsibility for the organization and effective operation of the Institute, including direction and supervision of its staff and activites.

The Department of Defense charter of the Armed Forces Institute of Pathology states that "the Director shall be a medical officer of the Army, Navy, or Air Force, selected on the basis of high professional qualifications in the fields of pathology and demonstrated medical administration ability."[3] He is appointed for a period of four years, rotating in order among the Army, Navy, and Air Force. The first Director appointed under this charter was Brigadier General Elbert DeCoursey, MC, USA, who served from 1950 to 1955. He was succeeded by Captain William M. Silliphant, MC, USN, 1955 to 1959. The present Director has served since 1959.

The Director is assisted by two Deputy Directors, one from each of the two military departments not represented by the Director. The present Deputy Directors are Colonel Joe M. Blumberg, MC, USA, and Captain Roger H. Fuller, MC, USN.

The Institute's organization consists of four major departments: the Department of Pathology, the American Registry of Pathology, the Medical Museum, and the Medical Illustration Service.

The Department of Pathology is comprised of nine major divisions covering such diverse areas as geographic pathology, military environmental pathology, basic sciences, dental, veterinary, and general and special pathology. Over two-thirds of the more than 600 individuals who make up the total staff of the Institute are assigned to the Department of Pathology. It is the center of the Institute's consultation, research, and educational activities.

The consultation service of the Institute is concerned with over 50,000 cases annually. Approximately 70 per cent of these are surgical consultations from military, Veterans Administration, and other governmental agencies throughout the world. Under the aegis of the American Registry of Pathology, the Institute accepts cases for consultation from civilian pathologists. These augment the material from the military sources, and together the collection of over 1,000,000 cases now on file make up the basis of the Institute's ever-growing educational program.

This latter activity consists of more than a dozen postgraduate short courses, usually of a week's duration, given throughout the year. Residency pathology training is available to military pathologists, and fellowships to both military personnel and civilians in all of the medical specialties. There are over 30 physicians and other professional personnel from an average of 20 foreign countries studying at the Institute at all times.

In addition to the educational activities carried on in the Institute, a wide variety of material is available for loan. This includes loan sets of microslides and lantern slides, gross tissues, films, and filmstrips. The staff of the Institute prepares numerous atlases and syllabi that accompany the loan material. Other educational material is available from the American Registry of Pathology. In the latter category are the fascicles of the Atlas of Tumor Pathology, which are prepared under the auspices of the Division of Medical Sciences of the National Research Council, printed at the A.F.I.P., and sold by the American Registry of Pathology at the Institute.

(Continued on page 585)

Obscure Gastrointestinal Bleeding

RONALD G. LATIMER, M.D.

Intern in Surgery, George Washington University Hospital

ALEC HORWITZ, M.D.

Clinical Professor of Surgery, George Washington University School of Medicine

GASTROINTESTINAL BLEEDING is frequently obscure as to etiology, as the following cases demonstrate.

REPORT OF CASES

Case 1. M. B., a six-year-old white boy, was first seen at Children's Hospital with the complaint of abdominal pain of two days' duration which was followed by anorexia, vomiting and the passage of a bloody stool on the day of admission. Examination was noncontributory with the exception of pale conjunctivae.

The hemoglobin was 7.2 Gm., the hematocrit 26 per cent, and the white blood cell count 9,600 with a normal differential count; the platelets were adequate, and the red blood cells were hypochromic. Sigmoidoscopy was performed to 15 cm., and the rectal contents were found to be brick red. A barium enema and small bowel X-ray examinations were normal. Additional laboratory studies included a prothrombin content of 76 per cent and a thymol turbidity of 7.4 units. The patient received two blood transfusions and was discharged improved.

He was admitted to the George Washington University Hospital approximately two months later for surgery for a possible Meckel's diverticulum. The hemoglobin was 13.9 Gm., the hematocrit was 42, and the white cell count was 9,700 with a normal differential; urinalysis was normal. When the tourniquet was applied to give intravenous Pentothal® in the room, the patient had a very positive Rumpel-Leede test. Surgery was postponed and more hematologic studies performed. The tourniquet test was 2-plus positive, the bleeding time 4 minutes and 46 seconds, the clotting time 14, 16 and 16 minutes, prothrombin time 14 seconds (control 14 seconds), the prothrombin consumption time 29 seconds (control 31 seconds), the plasma recalcification time 150 seconds (control 120 seconds), and the platelets 420,000 per c.c. It was thought prudent to withhold surgery at this time.

Five months later the boy was readmitted to Children's Hospital with the chief complaint of gross red rectal bleeding with a vague history of abdominal pain occurring four days previously. The only medications he was taking at that time were Chlor-trimeton® and Pyribenzamine®. Positive physical findings included right upper quadrant guarding and bright red blood on rectal examination. The hemoglobin was 11.2 Gm., the red blood cells numbered 3,320,000, and the white blood cells 8,500 with a normal differential count. The patient was treated with vitamins C and K and discharged improved.

Twenty-five months after his second hospitalization the boy was again admitted to Children's Hospital with the complaint of rectal bleeding of two days' duration. In the interval he had had another barium enema and small bowel X-ray examinations, which were also negative. Physical examination revealed a pale child with a blood pressure of 96/58, a pulse rate of 132, and a respiratory rate of 22 per minute. Bright red blood was noted on rectal examination. The hemoglobin was 7.9 Gm., the hematocrit 23, the platelet count 140,000, and the white blood cell count 9,400 with a normal differential count. Capillary coagulation time was 3.5 minutes, and the bleeding time was 30 seconds. The patient received two whole-blood transfusions and then underwent exploratory celiotomy following sigmoidoscopy under anesthesia. A 4 cm. Meckel's diverticulum was found two feet from the ileocecal valve and was reported to contain islands of gastric glands lining the mucosa (figure 1).

COMMENT

Meckel's diverticulum is said to occur in one to three per cent of autopsy cases. It has been reported as being two to three times more common in males. Its origin is from the embryonic connection of the primitive gut to the yolk sac—the omphalomesenteric or vitelline duct. If any portion of the duct persists, any of the following conditions may occur: a blind diverticulum, a fecal umbilical fistula, a band of tissue from the gut to the umbilicus, or a cyst of the duct.

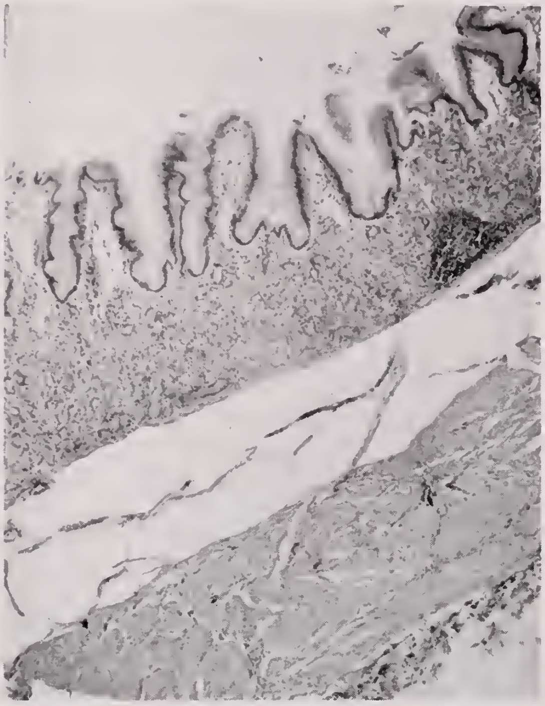


FIG. 1. Meckel's diverticulum showing "islands of gastric glands lining the mucosa."

Usually the congenital type of Meckel's diverticulum is located on the antimesenteric side of the intestine, and it may be found anywhere from 3 cm. to 6 feet from the ileocecal valve. The lining of the diverticulum is usually ileal but may be gastric mucosa, colonic mucosa, or pancreatic tissue. Sixty-two per cent of symptomatic diverticula contain gastric mucosa. Some of the complications of diverticula include inflammation, ulceration, hemorrhage, perforation, and intussusception. Diverticula occasionally serve as a focus for neoplasms and tuberculosis. Symptoms most often occur before the age of 25. In one series 74 per cent occurred before the age of fifteen.[1] In the series published by Gross[2] 50 per cent were operated on in the first two years of life. The most common symptom, as in this case, is the sudden passage of a bloody stool in a patient who has been asymptomatic previously. The blood is supposed to be maroon-colored and free of mucus and pus cells, thus differentiating it from intussusception and colitis.[1] In addition there may be associated abdominal pain that may resemble appendicitis. Gross[3] found Meckel's diverticulum to be the cause of obscure rectal bleeding in four per cent of his cases.

Case 2. C. S., a 15-year-old white girl of Welsh, English and Scottish stock was admitted to the George Washington University Hospital on July 17, 1958 with the chief complaint of anemia since the age of two. Her past history showed a hemoglobin ranging from seven to ten Gm. since the age of two. At the age of five she had a tonsillectomy and adenoidectomy. At the age of seven she received roentgen ray treatments to her enlarged thymus gland. At the age of 12 she had a complete gastrointestinal X-ray examination which was normal. She had been given two transfusions, one at the age of two and the other at the age of five. She had never been jaundiced nor did her anemia ever respond to the use of vitamin B_{12}, iron and HCl, folic acid, or liver.

The conjunctivae and buccal mucosa were pale. A systolic murmur was present over the precordium, and the spleen was palpable. The hemoglobin was 6.8 Gm., and the white blood cell count was 3,600 with a normal differential count. The platelets numbered 419,900, and there was 4 per cent reticulocytes. Occult blood in the stools was negative. The van den Bergh was 0.4 mg. total. A direct Coombs' test was negative. Total protein was 7.5 Gm. with an albumin globulin ratio of 2.1. A bromsulfalein test showed no retention. The thymol turbidity was 5.5 units, and the cephalin flocculation was 2-plus after 24 hours and 2-plus after 48 hours. A urinalysis was normal and VDRL negative. An L.E. preparation was negative. A marrow stain for iron was normal, with serum iron 130 mg. and plasma iron 250 mg. per 100 ml. of blood, and the erythrocyte half life was 11 days. A bone marrow showed a 1:1 myeloid-erythroid ratio but was interpreted as showing erythroid hyperplasia compatible with hemolysis. A radioactive chromium count was performed, and the majority of activity was localized over the spleen. The patient was given a therapeutic trial of pyridoxine without response. A second stool examination still showed no occult blood. On August 10, 1958 a splenectomy was performed and showed reticular hyperplasia and sinusoidal dilatation.

The patient was readmitted to the hospital on June 26, 1960 with occult blood in her stools, up to one-half pint a month, as determined by radioactive chromium-tagged red blood cells given intravenously. Physical examination was not remarkable. The hemoglobin was 12.3 Gm., the hematocrit was 39, and the white blood cell count was 10,160 with 32 segmented leukocytes, 62 lymphocytes, 3 monocytes, and 3 eosinophiles. The preoperative diagnosis was a bleeding Meckel's diverticulum. On exploratory celiotomy a large 3 by 4 cm. hemangioma on the antimesenteric border of the proximal jejunum 18 inches from the ligament of Treitz was found and excised (figure 2).

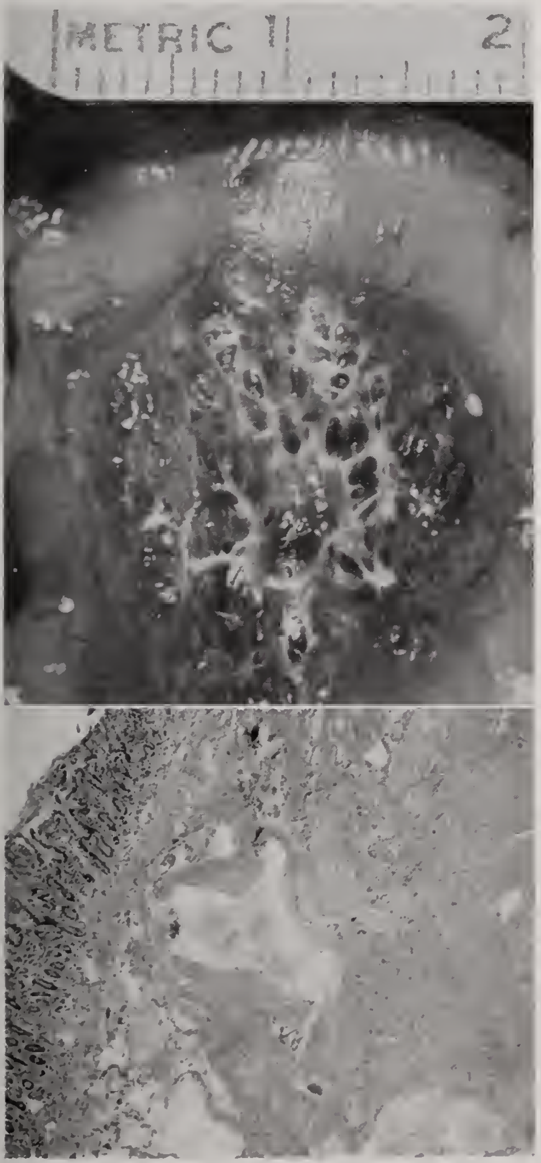


FIG. 2. Cavernous hemangioma of the single diffuse expansive type, located in jejunum.

COMMENT

In a review of hemangiomas and vascular tumors of the gastrointentinal tract by Gentry et al[4] the estimated occurrence of all vascular tumors of the gastrointestinal tract is about 1 in 14,000. Of these, 82 per cent are benign, and the benign lesions are twice as common in males as in females. Hemangiomas of the gastrointestinal tract in children are even more rare, and one observer[5] reported that only 15 cases (treated) have been reported in children under the age of 16 in the past 100 years.

The gastrointestinal hemangioma is a congenital vascular neoplasm that is thought to arise from some abnormality in the development of the fetal blood supply to the intestinal submucosa. The origin of these tumors is from the mesenchyme, and they grow by endothelial proliferation. Hemangiomas occur more commonly in the small intestine than in any other portion of the alimentary tract. Of all benign vascular lesions studied by Gentry et al, 41 per cent were in the small intestine.

Hemangiomas can be classified as follows:

1. Capillary
2. Mixed capillary and cavernous
3. Cavernous
    a. Multiple phlebectasis
    b. Simple polypoid
    c. Diffuse expansive (single)
    d. Diffuse expansive (multiple)

Gentry et al made the following interesting points:

1. Ulceration of the mucosa leading to gastrointestinal bleeding was present in more than one-half of the capillary hemangiomas.
2. Symptoms occurred in 89 per cent of those with capillary hemangiomas.
3. Ten per cent of benign vascular lesions were of the simple polypoid cavernous type, and 80 per cent of these produced symptoms.
4. Fourteen per cent of benign gastrointestinal vascular tumors were of the diffuse expansive type, and 95 per cent of these produced symptoms.
5. The cavernous hemangioma of the multiple phlebectasis type was observed more often than any other vascular lesion.

The symptoms of a hemangioma in the gastrointestinal tract include hemorrhage, obstruction, chronic blood loss, and anemia. All malignant vascular tumors were symptomatic, whereas only 66 per cent of the benign type produced symptoms. Bleeding from a vascular lesion of the gastrointestinal tract may be very severe because the parenchyma of these tumors lacks the hemostatic effects of smooth muscle and its ability to contract to stem blood flow. Bleeding was the presenting complaint in 19 per cent of the benign lesions and in 29 per cent of the malignant vascular tumors. In any patient who has unexplained anemia with melena, a vascular lesion of the hemangiomatous type should be suspected, especially if there are hemangiomas elsewhere on the body.

Case 3. R. B., a 67-year-old white woman, was admitted to the George Washington University Hospital on February 22, 1961 with the complaint of one episode of hematemesis and passage of three tarry stools with syncope following the passage of the third. The past history was noncontributory. Eight years prior to admission she had been treated empirically for a short period of time for what was thought to be a peptic ulcer. Four to five weeks prior to admission she had noted the onset of diffuse, burning abdominal pain.

Physical examination was within normal limits for the age except for large external hemorrhoids and black tarry feces noted on the examining finger. The hemoglobin was 9.0 Gm., and the hematocrit 23. The white blood cell count was 8,400, and the platelets numbered 101,500. The prothrombin time was 72 per cent. The van den Bergh was 0.5 mg. total. The blood urea nitrogen was 47.9 mg., and the alkaline phosphatase 2.2 units (Bodansky).

The preoperative diagnosis was a bleeding duodenal ulcer. Two days following admission the patient was explored and, in addition to cholelithiasis, a mass was noted in the jejunum six inches from the ligament of Treitz. When an enterostomy was performed, a spurting bleeding point was visible in the tumor. Pathologic report was leiomyoma of the jejunum with erosion of an artery (figure 3).

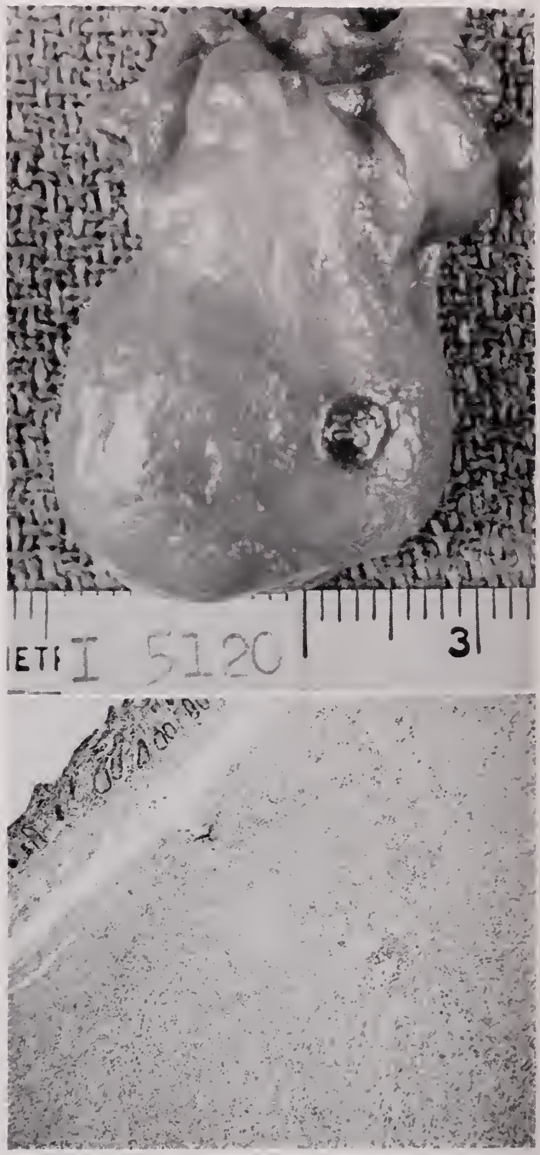


FIG. 3. Leiomyoma of jejunum. Note erosion of surface from which active arterial bleeding was noted at time of exploration.

COMMENT

Leiomyoma and its malignant counterpart, leiomyosarcoma, are tumors arising from the smooth muscle of the intestinal tract. Leiomyomas are reported to account for one per cent of all gastrointestinal neoplasms. Malignant degeneration was reported in 15 to 20 per cent in one series[6] and in greater than 50 per cent in another series.[7] Males predominate two to one, and the average age of occurrence is 49 years. Leiomyomas are located in the small bowel second only to their occurrence in the stomach. In the gut itself, they have been reported to occur in the following order of frequency: jejunum, ileum and duodenum.

Two types of leiomyoma exist, the submucosal type and the subserosal type. The subserosal type grows extraluminally and may present as an abdominal mass. Abdominal masses have been reported in 30 per cent of the cases, but the possibility of the tumor being malignant is far greater if the mass is palpable. The subserosal myoma is slow in growth and is usually located on the antimesenteric side of the bowel. It is twice as common as the submucosal type.[6] Gastrointestinal bleeding and melena occur in 31 per cent of the cases of the subserosal type.

The submucosal leiomyoma is three times as frequent in the jejunum and ileum as in the duodenum.[6] Bleeding is more frequent with the submucosal type because ulceration of the mucosa, central necrosis with sloughing of the mucosa, or intraluminal rupture of a vessel are all possible mechanisms for the cause of bleeding.[8] Of all benign tumors of the alimentary tract, the leiomyoma is the most likely to bleed, and therefore it is not surprising that 50 per cent of them are associated with recurrent attacks of melena.

Discussion

Obscure gastrointestinal bleeding, that is, bleeding for which no cause can be demonstrated after a thorough history, physical examination, laboratory tests and other procedures (including sigmoidoscopy, gastroscopy, the string test alone and with fluorescent dyes, the use of chromium-tagged red blood cells, etc.) is a problem that will face the physician frequently. In fact, in a large series of cases of gastrointestinal bleeding 15 to 25 per cent will fall into the category of obscure bleeding.[9] Furthermore, in most cases of melena and hematemesis 15 per cent will remain undiagnosed even after exploration.[10] The decision to explore for obscure bleeding is somewhat more of a perplexing problem to the surgeon. As Gross[3] states, "... it is sometimes exceedingly difficult for even the most experienced physician or surgeon to decide in an objective manner whether to operate or not." In favor of exploration are recent reviews that claim that in 25 to 30 per cent of the cases of obscure bleeding the cause can be definitely determined by exploration.[10] That leaves 70 to 75 per cent in which nothing is found, and this fact should weigh against exploration. The most common causes of obscure bleeding that are revealed by exploration are:

1. Peptic ulceration in 40 to 60 per cent
2. Tumors in 20 to 30 per cent
3. Other causes in 10 to 20 per cent

Definite criteria have not been established to determine which patients warrant exploration. This decision should be reached jointly by the patient, the internist, and the surgeon. Exploration is best performed at the time of active bleeding.

Summary

Three interesting cases of obscure gastro intestinal bleeding have been presented and discussed. With the exception of massive hemorrhage, no definite conclusion can be reached as to which patients with obscure bleeding deserve exploration. From the surgeon's point of view exploration should be done at a time of active bleeding.

1800 Eye Street, N.W.
Washington 6, D. C.
(Horwitz)

REFERENCES

1. Dowse, J. L.: Meckel's diverticulum. Brit. J. Surg., 1961, **48,** 392.
2. Gross, R. E.: The Surgery of Infancy and Childhood: Its Principles and Techniques. Philadelphia: Saunders, 1953, pp. 211–20.
3. Gross, R. E.: Ibid., pp. 369–76.
4. Gentry, R. W., Dockerty, M. B., and Clagett, O. T.: Vascular malformations and vascular tumors of the gastrointestinal tract. Int. Abstr. Surg., 1949, **88,** 281.
5. Copple, P. J., and Kingsbury, R. A.: Hemangiomas of small bowel in children. J. Pediat., 1961, **59,** 243.

(Continued on page 591)

A Clinical and Statistical Study of the Effect of Trichlormethiazide on Blood Pressure

RAYMOND O. WEST, M.D.
Takoma Clinic, Inc., Takoma Park, Maryland

Reduction of elevated blood pressure, before there are frank signs and symptoms of hypertension, might prevent serious cardiac, vascular, and renal sequelae. This was emphasized in a report by Smirk,[1] who conducted an eight-year study of patients with grade II hypertension and found a significantly ($P = <0.001$) higher mortality among those who had not received treatment than those who had. As a result of increased understanding of the physiology of hypertension and important advances in chemotherapy, it is now relatively easy to treat this condition in its early and reversible stages.

Often the blood pressure can be reduced sufficiently with no treatment other than a diuretic. Reserpine or one of the more potent antihypertensive drugs, such as a ganglionic-blocking agent, can be added if necessary. This regimen is suitable for nearly all hypertensive patients except those with severe renal failure and has the advantage of causing fewer side-effects than would occur with full therapeutic dosage of a single drug.[1-4]

Chlorothiazide was the first of the benzothiadiazines shown to be effective in hypertension. Trichlormethiazide, its 3-hydrogenated analogue, possesses greatly increased milligram-for-milligram potency. At doses equipotent for sodium excretion, there is proportionately less potassium loss with trichlormethiazide than with the earlier drug.[5, 6, 7] Although the effective therapeutic dose is 4 to 8 mg. daily, doses as high as 16 mg. daily for seven weeks[8] did not significantly alter the serum levels of sodium, potassium, or chloride. Carbon dioxide combining power, serum creatinine levels, and pH also were unaffected. Serum osmolality was lowered slightly.

Methods and Materials

Our study of trichlormethiazide, alone or with reserpine, was performed among outpatients seen in general practice. They had come for treatment of diseases unrelated to hypertension, and the elevated blood pressure, previously untreated, was discovered during routine examination. Approximately half were invited to join the study during their office visits. The others were patients who were not expected to return in the near future and therefore were invited to join by letter. It is interesting that all of these latter patients accepted.

We began with 54 patients, of whom seven were lost to the study because of unrelated reasons, such as leaving the city, and two were dropped before the trial was completed because of complaints of nausea following administration of one of the drugs.

Results are reported for the 31 females and 14 males who completed the study. These patients ranged in age between 27 and 90 years; the mean was 58 years. Except for the minimum reading of 150 mm. Hg systolic or 90 mm. Hg diastolic, the patients were heterogeneous. With very few exceptions, they had grade I hypertension and were free from symptoms.

We inquired about each patient's use of salt and tobacco but did not suggest any change in his consumption. Patients were also asked to evaluate the degree of nervousness, if any. We wished to determine if there was a correlation between any of these factors and the response to the drugs.

Consumption of salt was slight or absent in 21 patients, occasional in 16 patients, and regular in eight patients. Two patients smoked less than ten cigarettes daily, two smoked more than ten daily, three smoked pipes but not cigarettes, and 38 abstained from any use of tobacco. This extremely moderate use of salt and tobacco probably is due to the fact that we encourage all patients to minimize their consumption of these agents. We believe that the statements are accurate.

Eight patients described themselves as not at all nervous, 18 said they were slightly nervous, nine were moderately nervous, and ten were highly nervous. The patients' self-evaluations were in accord with our observations.

One tablet of 4 mg. trichlormethiazide (Naqua®) or one tablet of an experimental compound containing 4 mg. trichlormethiazide and 0.1 mg. reserpine was the daily dose.* Half the patients took trichlormethiazide for three weeks and then the combination for three weeks; in the other half, the reverse sequence was followed. The patients were informed of this procedure. The choice of which drug was to be given first was determined randomly by flipping a coin. No other drug that could affect the blood pressure was given during the trial.

To avoid being misled by single readings in patients with labile blood pressure, we took two readings during each of two visits; the mean of these four readings was used as the baseline for each patient. During treatment we recorded blood pressures weekly at the same time of day and on the same day of the week for each patient.

The mean of three readings during treatment with trichlormethiazide, the mean of three readings with the combination, and the mean for both treatments were compared with the pretreatment readings (table 1). The mean of pulse pressures was determined before treatment and during administration of each of the drugs. Student's t-test was used to determine the statistical significance of differences.

RESULTS

The systolic blood pressure was reduced by a mean of 23 mm. Hg during treatment with trichlormethiazide and by a mean of 29 mm. Hg during treatment with the combination; the reductions in diastolic pressure were respectively 19 mm. Hg and 22 mm. Hg. The overall means (obtained by halving the sum of the means for each drug) for the reduction with treatment were 26 mm. Hg for the systolic and 20 mm. Hg for the diastolic pressure (table 1).

A highly significant difference ($P = <0.001$) was found between the mean systolic ($t = 9.63$) and diastolic ($t = 6.65$) readings before treatment and the overall means with treatment. The difference was also significant ($P = <0.001$) between the means during treatment with trichlormethiazide and with the combination; the latter produced greater reductions in both the systolic ($t = 3.18$) and diastolic ($t = 3.98$) blood pressures (table 2).

In general, the greatest reductions occurred in the patients with the highest pretreatment readings. In nine patients whose systolic blood pressure initially was 200 to 250 mm. Hg, the reduction with treatment ranged between 27 and 71 mm. Hg and averaged 48 mm. Hg. In six patients whose diastolic pressure initially was 120 to 170 mm. Hg, the reduction with treatment ranged between 19 and 63 mm. Hg and averaged 35 mm. Hg.

On the same dosage of the drugs for the same length of time the 18 patients whose pretreat-

---

* Supplies of these drugs for the clinical trial were provided by W. Wesley Herndon, M.D., Department of Clinical Investigation, Medical Research Division, Schering Corporation, Bloomfield, New Jersey.

TABLE 1
Variations in Blood Pressure

Systolic Pressure in mm. Hg (series means appear in parentheses)				Diastolic Pressure in mm. Hg (series means appear in parentheses)			
Pretreatment	Mean with Trichlormethiazide	Mean with Combination	Mean of Both Treatments	Pretreatment	Mean with Trichlormethiazide	Mean with Combination	Mean of Both Treatments
180	148	147	148	80	73	73	73
180	127	131	129	90	80	80	80
160	120	138	129	90	80	80	80
150	138	123	131	90	86	86	86
155	129	133	131	85	81	87	84
210	175	161	168	110	88	83	86
170	140	153	147	110	97	103	100
175	147	123	135	100	87	80	84
150	180	140	160	90	80	73	77
155	142	127	135	105	86	88	87
195	167	182	175	100	90	90	90
250	202	172	187	170	106	100	103
180	147	157	152	80	73	70	72
230	170	172	171	110	87	78	83
150	129	127	128	100	88	90	89
200	155	158	157	140	105	103	104
155	180	148	164	90	80	83	82
145	140	132	136	90	85	87	86
150	143	123	133	75	80	75	78
170	147	142	145	110	89	90	90
190	138	137	138	130	97	80	89
210	183	143	163	120	105	90	98
170	170	157	164	90	93	101	97
150	130	137	134	100	86	90	88
150	138	130	134	95	92	73	83
210	172	177	175	80	77	77	77
150	148	153	151	100	97	87	92
150	125	130	128	95	82	83	83
180	130	133	132	105	82	80	81
150	140	133	137	100	87	80	84
240	177	160	169	110	97	90	94
170	150	138	144	80	77	73	75
150	143	133	138	100	90	87	89
160	155	133	144	90	95	90	93
170	133	136	135	120	97	85	91
230	197	208	203	100	87	70	79
150	132	130	131	80	80	80	80
205	160	162	161	80	78	80	79
170	152	160	156	100	100	93	97
170	166	151	159	110	95	95	95
170	129	133	131	110	91	90	91
150	142	128	135	120	112	90	101
150	155	148	152	80	83	80	82
150	139	135	137	90	99	88	94
180	161	136	149	100	80	89	85
(174)	(151)	(145)	(148)	(107)	(88)	(85)	(87)

ment systolic pressure was less than 160 mm. Hg and the 20 patients whose pretreatment diastolic pressure was less than 100 mm. Hg had a mean reduction of 13 mm. Hg systolic and 5 mm. Hg diastolic respectively. Treatment never caused the blood pressure to fall below optimal levels; the lowest reading throughout the experimental period was 120/70 mm. Hg.

There was no significant difference ($t = 1.14$; $P = 0.13$) in the pulse pressure means during treatment with either drug as compared to each other or to the pulse pressure before treatment.

The amount of dietary salt apparently did not influence the response to either drug. However, there were too few patients who used salt to permit firm conclusions to be drawn. Similarly, there were too few patients who used tobacco to permit the test for association. No statistical association could be found between the extent of the patient's nervousness and the amount of blood pressure reduction achieved with the medications.

TABLE 2
Summary of Enumeration Data

SYSTOLIC PRESSURE			DIASTOLIC PRESSURE		
mm. Hg	No. Patients, without Treatment	No. Patients, with Treatment*	mm. Hg	No. Patients, without Treatment	No. Patients, with Treatment*
120–129	0	4	70–79	1	8
130–139	0	17	80–89	8	21
140–149	1	6	90–99	11	12
150–159	17	6	100–109	12	4
160–169	2	7	110–119	7	0
170–179	9	3	120–129	3	0
180–189	5	1	130–139	1	0
190–199	2	0	140–149	1	0
200–209	2	1	150–159	0	0
210–219	3	0	160–169	0	0
220–229	0	0	170–179	1	0
230–239	2	0			
240–249	1	0			
250–259	1	0			
TOTALS	45	45		45	45

* Mean of both treatments.

None of the 45 patients who completed the study had any side-effects of therapy. In the two patients who discontinued the drug because of nausea we believe that the nausea was coincidental in one patient but possibly related to therapy in the other. Neither drug favorably or unfavorably affected any of the intercurrent diseases. A diuretic effect, manifested as weight loss unrelated to caloric reduction, occurred in some patients. A few reported nocturia, but this disappeared when we began to prescribe the drugs for administration early in the day.

The patients were withdrawn from therapy after the six weeks' trial but were asked to return for periodic follow-up. If the pressure continued to be satisfactory, no further medication was given. If the pressure rose again, treatment with the combination was resumed. Blood pressure in some patients remained at the treatment level for one month or longer after the drugs had been discontinued.

Discussion

Our clinical results with these agents are similar to those obtained by other investigators. Ernst[9, 10] reported that trichlormethiazide alone or with reserpine produced a satisfactory level of blood pressure in most patients with hypertension. The usual reduction was 30 to 50 mm. Hg in the systolic pressure and 20 mm. Hg in the diastolic pressure.

Ford[5] administered 8 mg. trichlormethiazide daily for three weeks to 20 patients with hypertension. The drug was effective alone or in combination with rauwolfia or ganglionic-blocking agents; after three weeks there was a significant ($P = 0.01$) reduction of blood pressure averaging 12/16 mm. Hg in 20 patients. As compared with chlorothiazide and hydrochlorothiazide, trichlormethiazide showed "... a lessening of potassium and bicarbonate excretion and pH changes which may be significant in decreasing the incidence of such hypokalemic manifestations as subjective weakness and electrocardiographic changes." He[6] later reported on the follow-up of these patients, who had been treated for six months with 8 mg. trichlormethiazide daily. There was no decrease of efficiency during long-term administration. The systolic and diastolic blood pressures were lowered gradually until desirable levels were reached, after which there was no further reduction. The serum chemistry values remained within normal limits in all patients. Trichlormethiazide and chlorothiazide were compared for their effect on urinary excretion of sodium and potassium. The ratio of sodium to potassium excretion was 1:1 with chlorothiazide and 2:1 with trichlormethiazide.

Sprogis[11] reported a satisfactory reduction of blood pressure in 48 of 51 patients treated with trichlormethiazide alone or with reserpine. As in our series, the combination proved somewhat more effective; the mean reductions were, respectively, 20/10 mm. Hg and 33/17 mm. Hg. Starling[12] treated 26 hypertensive and five preeclampsic patients with trichlormethiazide and reserpine; the mean reduction was 35/17 mm. Hg. He also administered the combination experimentally to five volunteers with normal blood pressure. There was no significant reduction and no treatment value below 120/70 mm. Hg.

Conclusions

Previous clinical reports of the ability of trichlormethiazide, alone or with reserpine, to lower blood pressure are confirmed by our finding, in 45 patients, of a statistically significant association between administration of these drugs and reduction of blood pressure. Trichlormethiazide with reserpine produces greater reductions than trichlormethiazide alone. Pulse pressure is not significantly affected. Apparently the response to this treatment is not influenced by the patients' emotional status. The drugs are tolerated well.

Summary

Trichloremethiazide, 4 mg. daily, alone or with 0.1 mg. reserpine was administered al-

(Continued on page 588)

Diseases of the Hip in Children

GERALD D. SCHUSTER, M.D.

Clinical Instructor in Orthopedic Surgery, Howard University College of Medicine; Attending Orthopedic Surgeon, Washington Hospital Center

The ability to properly understand, diagnose, and institute therapy for various affections of a joint must be preceded by a working knowledge of the anatomic relationships and pathomechanical functions peculiar to that joint.

Stability of the hip is gained primarily through its bony ball and socket-type joint but is reinforced by stout ligamentous attachments and overlying muscles. Not only is the acetabulum deepened by the fibrocartilaginous labrum, but the inferior aspect is actually completed by the presence of the transverse ligament. The head itself is firmly attached to the acetabulum by ligamentum teres. Blending with the capsule are three ligaments: the strongest, the iliofemorale (Y ligament of Bigelow) anteriorly and superiorly; the pubofemoral, anteriorly; and the weakest, the ischiofemoral, posteriorly. Due to the attachments in this fashion the posterior inferior aspect has been left the weakest and thus the most susceptible site for the occurrence of a traumatic dislocation.

When man assumed an erect posture the need for strong extensors and active stabilizers of the hip and pelvis was set forth. These needs have been served primarily by the gluteal muscles. The act of walking not only calls these stabilizers into coördinated movement but also relies upon the actions of the hip flexors, adductors, and rotators (figure 1).

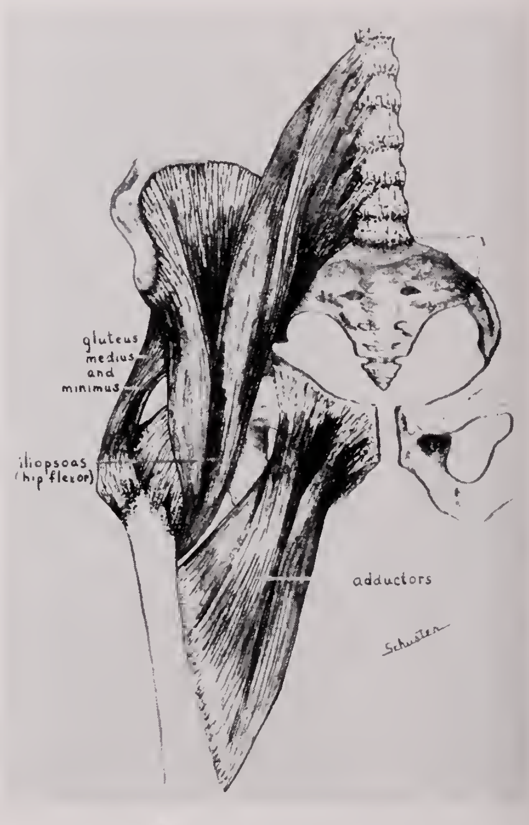


Fig. 1. Muscles that act on the hip joint.

Circulation and Nerve Supply of the Hip

Trueta and Harrison[1] have made us more cognizant of the differences in the circulation between the growing child and adult man. With ample room for individual variation, Trueta[2] has divided the circulation to the head and neck into five phases: (1) at birth, (2) infantile (four months to four years), (3) intermediate (four to seven years), (4) preadolescent (nine to ten years), and (5) adolescence. With this as a basis the anatomic cause for some of the findings in affections of the hip in children can be postulated. The main vessels entering into the circulation of the head and neck are the medial femoral circumflex, a branch of the profunda femoris, and an acetabular branch of the obturator artery (figure 2). There is also some supply anteriorly from branches of the lateral femoral circumflex and, lastly, there is also a cruciate anastomosis of vessels in the hip area.

The more important vessels have been named lateral and medial epiphyseal and superior and inferior metaphyseal, according to the site where they enter into the bone. The lateral epiphyseal and both metaphyseal vessels usually arise from the medial femoral circumflex artery. The medial epiphyseal artery is a continuation of the artery within the ligamentum teres which comes from the acetabular branch of the obturator artery. The circle of vessels on the neck tend to be deficient anteriorly, and the "vascular border of the joint" is most evident superiorly and inferiorly; it is here that the main arteries running to the metaphysis are found.

Following Hilton's law* the capsule and retinacular fibers are supplied by the femoral nerve via the nerve to the rectus femoris, sciatic nerve via the nerve to the quatratus femoris, and obturator nerve from its anterior division.

PATHOMECHANICS

Once the basic anatomic facts are understood we can proceed to explain certain signs and symptoms which are produced in various hip conditions.

Since the body forces applied to the femoral head are directed through a line which differs from the anatomic center, it can be seen how any condition which alters the direction of these forces can produce a limp (figure 3). The limp is usually one of the earliest signs of trouble in the hip joint. Any condition which alters the normal thrust through the femoral head to the femoral condyles, or changes the length of the muscle pull of the hip stabilizers, or causes pain will produce a limp. Antalgic or painful limp is characterized by the patient quickly removing his weight from the affected side, such as in transient synovitis or infectious conditions. A gluteal type limp or gait is characterized by the patient placing his body weight over the affected hip when the ipsilateral foot touches the ground, such as in poliomyelitis or coxa vara deformities.

The Trendelenburg sign indicates instability of the hip joint irrespective of the basic cause. This is shown in figure 4-B where, when stand-

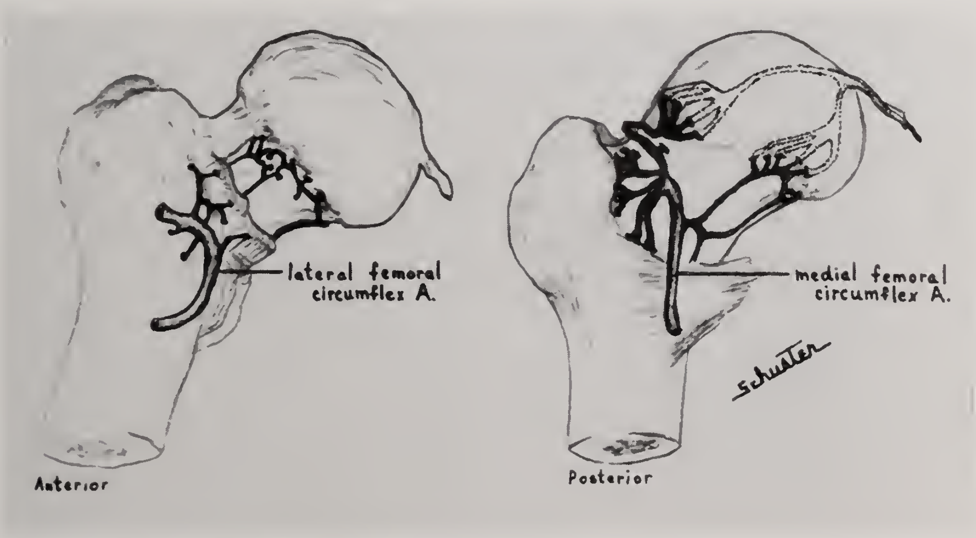


FIG. 2. Major arterial blood supply to the femoral head and neck.

---

* Hilton's law: A nerve trunk which supplies the muscles of any given joint also supplies the muscles which move the joint and the skin over the insertions of such muscles.

ing on the affected side, the pelvis cannot be stabilized and the ipsilateral side of the pelvis is high.

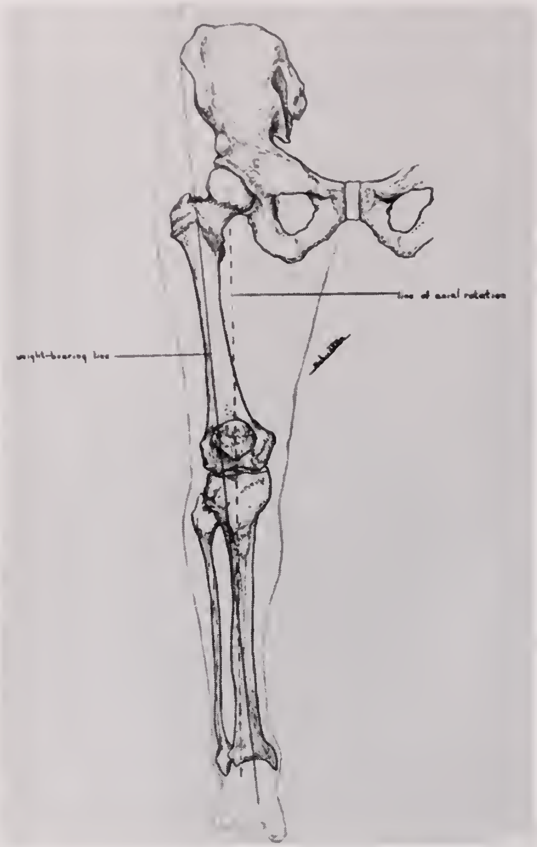


FIG. 3. Forces passing through the hip joint: anatomic and real.

CONGENITAL ABNORMALITIES

The term dysplastic hip is one which is rather loosely used by many people. It is not synonymous with a congenitally dislocated hip, although the dislocated hip may actually be dysplastic. Whenever the angle of the slope of the acetabulum decreases, causing a decreased depth of the acetabulum, or when the head is slow in appearing, we can speak of this hip as being dysplastic. This may represent an abortive attempt at a true congenital malformation,[3] that is, a congenital dislocation. The actual dysplasia of the hip probably occurs much more frequently than we have assumed, since these hips may spontaneously become normal. Contrarily, however, they can deteriorate to the state of a true dislocation and should therefore be watched closely. A single examination and X-ray study are frequently inadequate and therefore X-ray films taken at regular intervals may be more reliable in properly diagnosing the condition. Once the tendency toward deterioration becomes obvious, vigorous atraumatic treatment is indicated. Treatment, however, without sufficient indication is not warranted.

Through the recent years congenitally dislocated hips have been diagnosed with increasing accuracy by pediatricians. With constant vigilance in performing the initial newborn examination, the chances of missing this condition have decreased. The inability to fully abduct, the inequality of the gluteal folds, and the finding of a click when pushing the hip cephalad are all well known signs to the examining physician. The infrequent occurrence of bilateral dislocation which would show symmetry bilaterally may cause this lesion to be missed. X-ray films in the A-P and frog-lateral views should be obtained to confirm the clinical suspicion of a congenital dislocated hip. As soon as the definitive diagnosis is made therapy should be started. There are various schools of thought on the initial method of therapy, but I have found that in the very young gentle manual manipulation under anesthesia will result in a high percentage of reductions. In older children traction in bed or in a Hoke-type apparatus should be used prior to manual manipulation. Reduction trauma[4] is undoubtedly of considerable prognostic significance and, therefore, if an experienced operator cannot put the femoral head into position after two or three attempts, no further attempts should be made, and the hip should be reduced by surgery. All reduced hips should be immobilized in plaster in the position of maximal stability regardless of the position assumed. Corrective osteotomy of the shaft can always be performed at a later date to correct the weight-bearing alignment. Following plaster immobilization of four to six months the patient should be further protected by using a Fredjka-type splint until all chance of slippage has been ruled out by the surgeon.

Congenital coxa vara is a condition which is encountered rarely even in larger orthopedic centers. Clinically the condition is early seen to cause limp, limitation of abduction, and limitation of internal rotation. Due to the decrease in the cervicofemoral angle, the weight-bearing area of the head of the femur moves upward to the upper quadrant of the head. With this shift in the weight-bearing portion of the head, the head becomes more deformed.[5] Furthermore, as the distance between origin and insertion of the gluteus medius decreases due to the upward movement of the greater trochanter, the muscle cannot work at its greatest functional capacity, and instability and limp will result. X-ray studies show that this upward displacement of the trochanter has placed it above Nelaton's line,* even if the hip is adducted. Treatment of this condition must of necessity be somewhat radical. Subtrochanteric abduction osteotomy at the proper age is the procedure of choice. The purpose behind early osteotomy is the establishment of more anatomic lines of thrust before irreparable changes have occurred in the femoral head.

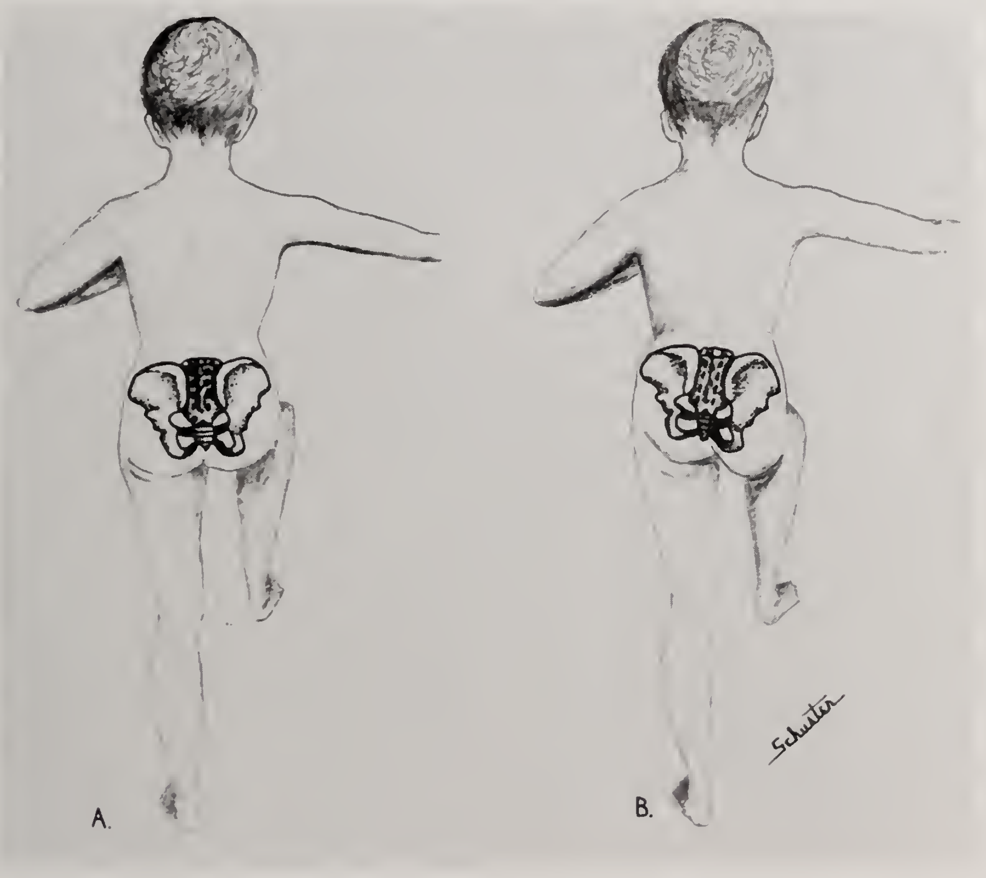


FIG. 4. Trendelenburg sign: (A) normal; (B) unstable hip.

The mechanical abnormality of congenital coxa valga is due to an increase in the angle of the neck of the femur at its junction with the shaft. As a primary congenital condition it is seen infrequently, but it is not uncommon to find this condition associated with such things as paralysis, knee ankylosis, rickets, osteomalacia, and dislocation of the hip. Whatever the etiology, from the mechanical point of view the important factors are the decreased shear and bending stresses caused by straightening of the neck shaft-angle and the shift of the weight-bearing area of the head to the upper inner quadrant. This condition produces a rather awkward gait with the thighs outwardly rotated and abducted. As a rule no definite treatment is needed except for adduction splints at night.

---

* Nelaton's line: One from the anterior superior iliac spine to the most prominent part of the tuberosity of the ischium.

INFLAMMATORY CONDITIONS

Of all the conditions which cause limp in the child a noninfectious transient synovitis is the most frequent. A history of an infection in some distant area of the body, such as an upper respiratory infection, followed in a week or two by an antalgic limp is most typical. On examination the child resists abduction, extension, and internal rotation of his affected hip. The X-ray films may reveal bulging of the capsule but no bone involvement. The child should be observed and if necessary placed in bed with Buck's extension traction to help relieve the iliopsoas spasm. However, no painful hip associated with a limp can be passed over lightly, and one must be sure that conditions such as pyogenic arthritis, tuberculosis, and Perthes' disease are ruled out.[6]

Rheumatoid involvement of the hip tends to become a chronic, painful, ankylosing disease. Management of these patients is quite difficult and is centered about the prevention of deforming contractures during the more acute phase. Salicylates, steroids, and gold[7] all have their place in the treatment of acute rheumatoid arthritis in children. Active physical therapy and forced motion are not indicated during the acute phase. Traction and rest of the joint except for daily passive movement are helpful. Once the acute phase has passed, attempts to gain all the motion possible should be the goal. Flexion contractures and adductor tightness should be corrected conservatively or, if necessary, surgically. The eventual outlook for severe cases, however, is quite dismal, and the parents and patient should be educated to this fact at the earliest opportune moment.

The catastrophe associated with pyogenic arthritis is so great that no child who presents symptoms suggestive of the disease should be dismissed as not infected until all available tests and procedures, including needling or open biopsy if necessary, are utilized. Unfortunately, this condition is not only introduced hematogenously but also iatrogenically. In the pre-walking infant, constant crying, fever, the dislike for crawling or moving, and tenderness over the hip may be among the presenting signs and symptoms. However, the only presenting symptom outside of fever may be the presence of a swollen thigh. The proteolytic enzymes excreted by the pyogenic bacteria, especially the staphylococci, can destroy the articular cartilage of a joint in less than 24 hours. The pressure built up by the presence of pus in the closed joint space hastens the lysis of the cartilage. Either multiple needlings or surgical incision and drainage are necessary in conjunction with the use of the proper antibiotics.

ILLUSTRATIVE CASE

A one-month-old white male infant was first seen on February 1, 1959 with a history of swelling of the right lower extremity of three days' duration. The left lower extremity had swollen intermittently during the same time. Initial examination revealed the child to have a temperature of 100.4°F and to be quite pale and irritable. There was 2+ pitting edema of the anterior abdominal wall up to the xiphoid Gross swelling and discoloration of both thighs were marked. Initial laboratory studies showed the white blood cells to number 36,800, with 17 per cent neutrophils, 16 per cent band forms, 3 per cent juveniles, 47 per cent lymphocytes, 5 per cent monocytes, and 12 per cent myelocytes. The hemoglobin was 7.9 Gm. with a hematocrit of 27.

Initially the patient was thought to have an intrapelvic tumor, but the morning after admission a fluctuant mass was noted on the right thigh. Subsequently this mass was aspirated and gross pus obtained on February 2, 1959. Under local anesthesia incision and drainage of both hips was performed, and the child was started on large doses of antibiotics. The culture revealed the organism to be *Diplococcus pneumoniae*. The patient responded well and by the third day was able to resume oral feedings. By the twentieth day the drainage had ceased and the wounds were healing well. The patient was placed in a bilateral hip spica and Bicillin® was given. He was discharged from the hospital on February 27, 1959.

On April 20 the cast was changed and the hips remained reduced. On June 29 X-ray films revealed both hips to be dislocated. On July 17 manipulation of both hips under anesthesia was unsuccessful. In August the infant was admitted to the hospital and an open reduction of the left hip performed.

In February, 1960 the cast was removed and X-ray films revealed the left femoral neck to still be in the acetabulum. It was decided to defer surgery on the right hip until better motion was apparent in the left. By July, 1960 the patient was walking with assistance but had very little motion in his left hip. The right hip continued to remain dislocated. In October, 1960 movement of the right hip was good but motion of the left side was almost absent. Abduction and external rotation were 0° and internal rotation 25°. In April, 1961 the child was walking well with a limp despite a 40° flexion contracture of the left hip. No further surgical intervention is contemplated in the near future.

In children who are walking the typical antalgic gait assumed is due to spasm of the iliopsoas muscle. The hip therefore assumes a flexed, adducted, and externally rotated position.

For many years not only were the cases of true tuberculosis of the hip grouped together but also all the cases which we now know of as Legg-Calvé-Perthes disease were thought to be tuberculosis. Since the advent of more widespread tuberculosis detection and effective antituberculous chemotherapy, bone tuberculosis in general has become less prevalent. It is thought that tuberculosis in the bone is secondary to tuberculosis elsewhere, mainly in the lungs. However, the patient need not have active pulmonary tuberculosis to have active osseous tuberculosis. The onset is slow and the patient may have a limp long before he has pain and limitation of movement. A high degree of suspicion should always be kept in any case in which the X-ray films show some osteoporosis and subchondral cystic changes in the femoral head. The cartilaginous surfaces are quite resistant to the enzymes of this bacillus. Treatment consists of immobilization of the joint and institution of antituberculous chemotherapy. Frequently, however, the disease is so advanced that arthrodesis as a primary procedure is indicated. In these cases extra-articular arthrodesis is the preferred procedure. Sinus-tract formation is much less frequent since the advent of effective chemotherapy. Lastly, it should be remembered that any infected joint may go on to spontaneous arthrodesis, and therefore the position of function should always be maintained in the cast.

When poliomyelitis affects the hip muscles the frequent consequence is instability. No one specific group of muscles is singled out by this disease; it can be either spotty or all-inclusive. Fortunately, as with the other infectious diseases, we are seeing much less of this deforming entity. Many complications can arise during the early phases of acute poliomyelitis, and these should be watched for so that early orthopedic handling can prevent more serious permanent deformities. Flexion contractures, the formation of marked coxa valga, and the subluxation of the femoral head are some that should be watched for. The handling of the various problems arising from poliomyelitis are too extensive to go into here.

Trauma

Fractures of the proximal end of the femur are so rare that no one has great experience with them. They are usually indifferently treated, with bad results. These fractures may be divided according to location, this being of value in deciding on the type of therapy to be used and the prognosis to be expected. The complications most frequently encountered are avascular necrosis, nonunion, malunion, and disturbances in growth. If one takes into consideration the vascular supply to the head and neck, it is not difficult to see how these complications can arise. With whatever method of immobilization is chosen, gentle handling is a must.

Traumatic dislocation of the hip is exceedingly rare and a condition with which I have had no personal experience at all. The complications of late avascular necrosis and degenerative arthritis should be kept in mind.

VASCULAR CONDITIONS

Pathologically, osteochondritis dissecans is seen to occur due to a loss of blood supply to an area of the subchondral bone. Whether trauma can act as an inciting agent has not been firmly established. The most characteristic symptom associated with this condition is its vagueness. There may be some atrophy of the thigh which can be seen with any lesion affecting the hip or proximal femur. If the dead portion of the bone and its overlying cartilage should become completely separated, symptoms of a loose body in a joint would result. The treatment of an early case is conservative, while with a free loose body excision of the fragment is indicated.

Legg-Calvé-Perthes syndrome[8] occurs in children usually between the ages of four and ten years, although I have seen it in children as young as two. Males are affected about four times as frequently as females, and the condition tends to be bilateral in about ten per cent of the cases. It should be appreciated that symptoms in the early case may not be corroborated on X-ray examination. Therefore, I have followed the policy of making more X-ray films six weeks after the initial examination, when either the symptoms and/or the X-ray films are questionable. The children are best treated by bed rest and traction during the stage of acute synovitis. They should then be treated with nonweightbearing on the affected side until the healing stage is advanced. It may take anywhere from one to five years to go through the complete stages of this condition. The final functional prognosis in these children is guarded, and in one large study[9] it was concluded that in all their long-term follow-ups not one normal hip was found.

The typical story of a painful limp in a teenage child who has a "Fröhlich"-type build should alert the examiner to the possibility of a slipped upper capital femoral epiphysis. The early symptoms may exist many months before the disability is sufficient to bring the patient to the doctor. Even then the physician may be misled if, as frequently happens, the pain is referred only to the knee. It is imperative, therefore, that those teenagers who have the painful limp and walk with their foot externally rotated and their hip adducted be carefully scrutinized for hip disease. In treating these children the high incidence (20 to 40 per cent) of bilateral occurrence should be kept in mind. Many physicians treat these patients conservatively with just bed rest. I have seen several cases in which the head has slipped even while the patient was in bed, and therefore I feel as though they should have a pinning alone, even when they have, as Blount[10] states, slipped up to one cm. When they have slipped further than this and an osteotomy is indicated, a pinning can be combined with a subtrochanteric osteotomy. A subtrochanteric osteotomy is contraindicated only when the posterior displacement of the head is exceedingly great.

An area of osteochondrosis occurring at the ischiopubic junction (Van Neck's disease) should be recognized as a cause of a painful limp. It may closely simulate the symptoms produced by intra-articular hip disease.

TUMORS

One must always consider the possibility of the presence of a tumor in the hip area as a cause of limp. Usually osteoid osteoma, simple bone cyst, and eosinophilic granuloma are associated with a barely discernible shortening of the stance phase but are prone to have a considerable amount of measurable thigh atrophy. The treatment of the various lesions is dependent upon their size and position. Surgical removal cures the osteoid osteoma. The bone cyst and eosinophilic granuloma can be treated by curettement and if necessary packing of the cavity with bone chips.

MISCELLANEOUS CONDITIONS

Other conditions which can affect the hips along with other joints include arthrogryposis multiplex congenita, cerebral palsy, and the chondrodystrophies. A useful method of obtaining information about excessive muscle tone in the infant is by shaking the limb. In children who walk the flexion, adduction, scissoring gait is quite typical. Corrective operative procedures can be resorted to when conservative splinting and bracing have failed.

SUMMARY

Some of the basic anatomic relationships, pathomechanical functions, and more commonly occurring affections of the hip have been presented. The more salient features of these diseases and their treatment have been discussed. A case of bilateral pneumococcal pyoarthritis has been added to the literature.

The child is not a small adult, and many of the conditions which affect children exemplify this fact. The diagnosis of disease occurring at the hip should be made as early as possible and the correct therapy instituted as soon as the diagnosis is made.

REFERENCES

1. TRUETA, J., AND HARRISON, M. H. M.: Normal vascular anatomy of femoral head in adult man. J. Bone Joint Surg., 1953, **35-B**, 442.
2. TRUETA, J.: Normal vascular anatomy of human femoral head during growth. Ibid., 1957, **39-B**, 358.
3. LEFFMAN, R.: Congenital dysplasia of hip with special reference to congenital subluxation or "preluxation." Ibid., 1959, **41-B**, 689.
4. PLATOU, E.: Luxation coxae congenita. Ibid., 1953, **35-A**, 843.
5. STEINDLER, A.: Kinesiology of the Human Body. Springfield, Ill.: Thomas, 1955.
6. FERGUSON, A. B., JR.: Limp in childhood. Penn. Med. J., 1956, **59**, 1351.
7. HOLLANDER, J. L.: Arthritis and Allied Conditions. Philadelphia: Lea, 1960.
8. SCHUSTER, G. D.: Comparative study of Legg-Calvé-Perthes syndrome in series of seventy-six cases. Med. Ann. D. C., 1961, **30**, 322.
9. GOFF, C. W.: Legg-Calvé-Perthes Syndrome. Springfield, Ill.: Thomas, 1954.
10. BLOUNT, W. P.: Fractures in Children. Baltimore: Williams & Wilkins, 1954.

The Armed Forces Institute of Pathology—Townsend

(Continued from page 568)

The research activities of the Institute are extremely diverse. The methodologies include techniques of histopathology, histochemistry, biochemistry, physical chemistry, biophysics, ultrastructure examination, the study of gross anatomic functional changes, coördination of clinical and pathologic study of cases, and biostatistics. The research program encompasses the medical and dental diseases not only of man but of animals. The current program consists of 240 different projects. In calendar year 1961 these activities resulted in 89 professional publications. The scope of the studies ranged from a study of the effects of cosmic rays on living animals in the stratosphere to mechanisms of utilizing biophysical means of identifying and determining the weight of chromosomes in cells.

From its humble beginnings the Institute of Pathology has progressed and has reason to be proud of its growth and achievements over the past century. Along with the fine medical schools, the many medical research institutes, and hospitals it has become a vital part of the great medical center that has come into being in the Nation's Capital today.

REFERENCES

1. HENRY, R. S.: The Armed Forces Institute of Pathology. Its First Century, in preparation.
2. WALL, J. S.: Personal communication to Dr. Sloan, January 13, 1950.
3. Charter of the A.F.I.P., Army Regulation 40-29, Bureau of Medicine and Surgery (Navy) Instruction 6510.1B, Air Force Regulation 160-38, Washington, D. C., December 20, 1954.

Acute Suppurative Parotitis Associated with Certain Drugs Used in the Treatment of Parkinsonism*

L. G. WALKER, JR., M.D.
TALMADGE HIEBERT, Ph.D.
NICHOLAS P. D. SMYTH, M.B.
Washington

Acute suppurative parotitis is a well-known complication of surgery and of chronic debilitating diseases. Factors predisposing to this disease are general body dehydration, which arrests salivary secretion, as pointed out by Howard,[1] a dirty mouth, and general debility.

Xerostomia has been reported fairly consistently as an undesirable side-effect of several of the drugs currently used in the treatment of parkinsonism; this has been especially true of trihexyphenidyl (3-[1-piperdyl]-1-phenyl-1-cyclohexyl-1-propanol HCl (Artane®) and its close congener, procyclidine HCl (Kemadrin®).[2, 3] However, until now neither drug has been directly implicated in the development of a natural sequel to the depression of salivation, that of acute inflammation and infection of the parotid glands.

Two cases of acute suppurative parotitis have recently been treated on the Surgical Service of Saint Elizabeths Hospital which occurred in elderly women, in both of whom treatment of parkinsonism had recently been started.

Saint Elizabeths Hospital is an 8,000-bed Federal mental institution with a large geriatric population. With institutionalized elderly patients in general and psychotic elderly patients in particular, oral hygiene is a constant problem. With a decrease in salivary secretion induced by drugs, the conditions are ripe for salivary gland infection.

Report of Cases

Case 1. A 78-year-old white woman was admitted to the Medical and Surgical Division of Saint Elizabeths Hospital on January 25, 1962 because of an inflamed and tender swelling over the right mandible, a rectal temperature of 100.6°F, and a generalized maculopapular rash of about 18 hours' duration. She had been seen in the Neurology Clinic on October 10, 1961 for evaluation of weakness and difficulty in locomotion. The only remarkable findings at that time were a "somewhat rigid spasticity of the muscles of the extremities, with increased deep tendon reflexes and bilateral Babinski signs." The impression was advanced cerebral arteriosclerosis with involvement of the premotor and basal ganglia. She was started on trihexyphenidyl, 1 mg. t.i.d.

Physical examination at the time of admission revealed an acutely ill, prostrate, and febrile elderly woman with an erythematous, brawny swelling over the right parotid area. Pus could be expressed from Stensen's duct on the right. A fine maculopapular rash was distributed mostly over the back, anterior trunk, and arms. The white blood cell count was 26,192 with a marked shift to the left. Urinalysis was within normal limits, and a roentgenogram of the chest was normal for the patient's age. A culture from Stensen's duct revealed *Staphylococcus aureus*, coagulase positive.

The patient was taken to the operating room, and the right parotid gland was adequately incised and drained. Postoperatively she was placed on chloramphenicol, given intravenous fluids for hydration, given mouth care, and placed on clear liquids by mouth as tolerated. She became afebrile after two days, and the rest of her course was uneventful. Her rash disappeared the day following her operation.

---

* From The George Washington University School of Medicine and the Surgical Service of Saint Elizabeths Hospital, Washington 20, D. C.

Case 2. An 84-year-old white woman was admitted to the Medical and Surgical Branch of Saint Elizabeths Hospital on January 29, 1962 because of a swelling over the right mandible, malaise, and a rectal temperature of 102°F. She had been hospitalized three months prior to this admission with progressive lethargy and unresponsiveness as well as generalized muscular spasticity. She had been on Dilantin®, 100 mg. t.i.d. for many months for a history of convulsive seizures. The Dilantin was discontinued, and the patient became more alert and active, but muscular rigidity persisted. She was then placed on procyclidine, 2.5 mg. daily, and on December 11, 1961 Phenergan®, 25 mg. t.i.d. was added to her regimen.

She was found to be toxic, flushed, febrile, and unable to open her mouth due to a swollen and tender right jaw. Pus was draining from Stensen's duct. Except for severe muscle weakness other findings were unremarkable. The white blood cell count was 30,000 with a marked shift to the left. Urinalysis was within normal limits and a roentgenogram of the chest was normal for the patient's age. Serum amylase was 120 Somogyi units. A culture of purulent drainage from Stensen's duct revealed *Staphylococcus aureus*, coagulase positive.

An emergency incision and drainage of the right parotid gland was done. Postoperatively the patient was placed on chloramphenicol, hydrated, and given mouth care and liquids by mouth as tolerated. Her recovery was uneventful.

DISCUSSION

The reduction of symptoms by chemotherapy in the very disabling disease of paralysis agitans represents one of the great strides forward in medicine.[4, 5] The action of these drugs is principally upon muscular rigidity and to a lesser extent upon tremors. Atropine and certain of the belladonna alkaloids were the first to be employed. The newer drugs tend to depress salivation less than atropine while retaining the antirigidity characteristics. Artane, for example, possesses about one-tenth of the potency of atropine in inhibiting salivation but has about one-third its potency in inhibiting experimental tremors in monkeys.[6] Dryness of the mouth, however, is still the most frequently reported unpleasant side-effect of Artane, being observed in 24 per cent of the patients taking the drug in Doshay's series.[2] Lerner[7] found the side-effects of Kemadrin to be similar to those of Artane.

Dehydration and a dirty mouth have been most incriminated as predisposing to acute parotitis. Howard's observations,[1] however, demonstrated that the mechanism of dehydration lies in the depression of salivation, since the subsidence of inflammation of the parotid gland occurs concurrently with the resumption of physiologic salivation several days after hydration has been accomplished. Dehydration and depressed salivation thus produce the same effect, and either can set the stage for salivary gland infection.

The treatment of nonsuppurative parotitis, when both cannulation of Stensen's duct and blood culture reveal no organism, is directed to restoration of physiologic salivation.[8]

In pyogenic parotitis the problem is more complex. In addition to correction of dehydration and local conditions in the mouth, the infecting organism should be identified, its sensitivity determined, and the appropriate antibiotic given. However, the commonest bacterial invader currently is *Staphylococcus aureus*, which is frequently drug-resistant. Furthermore, the infection often progresses rapidly to multiple abscess formation so that early surgical drainage is indicated. This should be done before fluctuation is demonstrated as this is a very late sign, if it occurs at all.[8]

The method of drainage which we prefer is that of Blair[9] as modified by Byars.[10] Under general endotracheal anesthesia, if the patient's condition permits, a standard incision for exposure of the parotid gland is made, extending both in front and behind the ear and along the lower margin of the jaw for several cm. The skin flaps are dissected back to expose the entire superficial aspect of the gland. The gland is drained by inserting a blunt clamp into each of the abscesses and opening it in the direction of the facial nerve branches. During this part of the operation the face is carefully watched for muscular twitching so that damage to the facial nerve can be avoided. Drainage by sharp incision is not used because of the danger of cutting a major branch of the nerve.[8] The incision is packed open, and the dressing is changed frequently postoperatively. The large wound heals well without suturing, and there is minimal scarring.

Summary and Conclusions

Two cases have been presented of elderly, institutionalized patients with sudden onset of acute pyogenic parotitis requiring surgical drainage for relief. Both patients had been on atropine-like, anti-rigidity drugs for approximately three months, trihexyphenidyl (Artane) in the first case, and procyclidine (Kemadrin) in the second case.

The relationship between depressed salivation, dehydration, and poor oral hygiene as predisposing factors for acute parotitis in elderly, debilitated patients is clear-cut. It is suggested that this complication be borne in mind when placing such patients on mouth-drying drugs.

The prevalence of drug-resistant *Staphylococcus aureus* as the infecting organism makes early surgical drainage the treatment of choice.

REFERENCES

1. Howard, J. M.: Gastric and salivary secretion following injury; systemic response to injury. Ann. Surg., 1955, **141**, 342.
2. Doshay, L. J., Constable, K., and Zier, A.: Five-year follow-up of treatment with trihexyphenidyl (Artane); outcome of 411 cases of paralysis agitans. J.A.M.A., 1954, **154**, 1334.
3. Zier, A., and Doshay, L. J.: Procyclidine hydrochloride (Kemadrin) treatment of parkinsonism; results in 108 patients. Neurology, 1957, **7**, 485.
4. Doshay, L. J.: Thirty years of progress for therapy of paralysis agitans (Parkinson's disease). J.A.M.A., 1958, **167**, 1195.
5. Doshay, L. J., and Boshes, L. D.: Parkinson's disease in general practice. Med. Clin. N. Amer., 1961, **45**, 1595.
6. Cunningham, R. W., and others: Pharmacology of 3-(N-piperidyl)-1-phenyl-1-cyclohexyl-1-propanol HCl (Artane) and related compounds. New anti-spasmodic agents. J. Pharmacol. Exp. Ther., 1949, **96**, 151.
7. Lerner, P. F.: Kemadrin, a new drug for treatment of parkinsonian disease. J. Nerv. Ment. Dis., 1956, **123**, 79.
8. Spratt, J. S.: Etiology and therapy of acute pyogenic parotitis. Surg. Gynec. Obstet., 1961, **112**, 391.
9. Blair, V. P., and Padgett, E. C.: Pyogenic infection of the parotid glands and ducts. Arch. Surg., 1923, **7**, 1.
10. Byars, L. T.: Preservation of facial nerve in operations for benign conditions of parotid area. Ann. Surg., 1952, **136**, 412.

Effect of Trichlormethiazide on Blood Pressure—West

(*Continued from page 577*)

ternately for three weeks each to 45 patients whose pretreatment blood pressure was at least 150 mm. Hg systolic or 90 mm. Hg diastolic. The series mean before treatment was 174/107 mm. Hg; with treatment, the mean was 148/87 mm. Hg. This difference was found to be highly significant ($P = <0.001$). A significant difference was also found between the reductions obtained with trichlormethiazide and those obtained with the addition of reserpine; the combination produced greater reductions.

No association could be found between the response to either treatment and the degree of nervousness. The pulse pressure was not significantly affected. A possible correlation between the patients' response to treatment and use of salt or tobacco could not be subjected to the test for association.

Two patients were withdrawn from the study before completion because of complaints of nausea, but none of the 45 patients who completed the six weeks' trial had any untoward reaction.

REFERENCES

1. Smirk, F. H.: Amer. Heart J., 1961, **61**, 272.
2. Gifford, R. W., Jr: J.A.M.A., 1961, **177**, 70.
3. Gill, R. J., Jenson, W. K., Freeman, R. B., and Duncan, G. G.: Amer. Practit., 1960, **11**, 1007.
4. Grollman, A.: Clin. Pharmacol. Ther., 1960, **1**, 735.
5. Ford, R. V.: Amer. J. Cardiol., 1960, **5**, 407.
6. Ford, R. V.: Southern Med. J., 1961, **54**, 666.
7. Fuchs, M., Moyer, J. H., and Newman, B. E.: Ann. N. Y. Acad. Sci., 1960, **88**, 795.
8. Hutcheon, D. E., and Takasu, T.: Clin. Pharmacol. Ther., 1960, **1**, 444.
9. Ernst, E. M.: Penn. Med. J., 1960, **63**, 1629.
10. Ernst, E. M.: Curr. Ther. Res., 1961, **3**, 167.
11. Sprogis, G. R.: Ibid., 1961, **3**, 393.
12. Starling, R. J.: J. Med. Ass. Georgia, 1961, **50**, 442.

Topical Dexamethasone in Dermatoses: An Evaluation of Patient Acceptance

ARNOLD H. GOULD, M.D.
Assistant Clinical Professor of Dermatology, Georgetown University School of Medicine

SIDNEY OLANSKY, M.D.
Professor of Dermatology, Emory University School of Medicine

THE SYNTHETIC glucocorticoid adrenocortical hormones (cortisone/hydrocortisone-type steroids) occupy a generally well-established and perhaps distinctive place in palliative management of allergic disorders. This position is quite probably due to factors that make these compounds particularly suitable to anti-allergy therapy for their combined anti-inflammatory and anti-allergic effects, their ability to produce these effects by simulating the tissue-protective function of the endogenous hormone, and their adaptability to both systemic and topical administration.

Corticoids produce their anti-inflammatory and anti-allergic effects presumably by abolishing sensitivity reactions at cellular level, thereby inducing tissue immunity to the deleterious influences of antigen-antibody complexes. In this respect they differ pharmacologically from their two commonly used clinical counterparts, the antihistamines, which block further access of histamine to already affected tissues, and the sympathomimetics, which reverse the effects of existing histamine-induced reactions. This fundamental difference in mode of action of the glucocorticoids, plus their potent anti-inflammatory activity, broadens the clinical approach to allergy management, particularly in cases in which response to the nonsteroid agents mentioned is absent, inadequate, or resistant. In certain acute allergic episodes and acute exacerbations of severe chronic allergies the anti-inflammatory/anti-allergic corticoids may even be considered the drugs of choice.

Topical effectiveness of the glucocorticoids in both ocular and dermatitic allergies has been repeatedly demonstrated ever since the advent of hydrocortisone. This efficacy can have no better substantiation than that suggested by the large number and variety of presently available topical preparations containing one or another of the currently used adrenocortical steroids.

MATERIAL AND METHOD

This report is confined to an analysis of results obtained in a large series of dermatitic patients treated with two recently formulated topical corticoid preparations.* The primary purpose of the study was to evaluate the individual merits of these medications on the basis of patient-acceptance as measured in terms of therapeutic effect and tolerance. No effort was made to demonstrate superiority to similarly constituted topical preparations in current use;

---

* The preparations used in this study were supplied by Henry A. Strade, M.D. of Organon, Inc., West Orange, New Jersey.

any evidence pointing in that direction should therefore be considered as a reflection of the clinical findings.

The corticoid formulations used were (1) dexamethasone in a concentration of 0.1 per cent* and (2) dexamethasone in a concentration of 0.1 per cent together with a 2 per cent content of tar distillate.† A bland, water-washable, odorless, and nonstaining cream-type base served as the presenting vehicle.

The study was comprised of 336 adult patients of both sexes presenting a representative range of inflammatory and allergic dermatoses. These were patients seen in clinic and private dermatologic practice. Procedurally they were divided into three treatment groups as follows: 87 treated with dexamethasone (table 1), 200 treated with the dexamethasone/tar combination (table 2), and 49 treated with both formulations in alternating courses of therapy (table 3). Our special interest in the tar-containing preparation accounts for the large number of patients on whom we used this medication.

TABLE 1

Results in 87 Patients Treated with Dexamethasone Cream

CONDITION	NO. PATIENTS	COMPLETE REMISSION	IMPROVED	UNIMPROVED	WORSE	REACTIONS
Contact dermatitis	27	22	5	0	0	0
Atopic dermatitis	20	5	15	0	0	0
Dyshidrosis	9	2	7	0	0	0
Neurodermatitis	8	3	5	0	0	0
Stasis dermatitis	4	0	4	0	0	0
Chronic urticaria	2	0	2	0	0	0
Erythema	3	1	1	1	0	0
Miscellaneous	14	5	9	0	0	0
TOTALS	87	38	48	1	0	0

CRITERIA OF PATIENT-ACCEPTANCE EVALUATION

As previously stated, we were concerned chiefly with patient-acceptance and/or preference of the medications studied, placing particular emphasis on antipruritic effect and freedom from undesirable reactions to active ingredients or vehicle. A rigid criterion for tolerance measurement was set up so that even a drying effect would be considered a reaction if it caused an increase in itching.

TABLE 2

Results in 200 Patients Treated with Dexamethasone with Tar Cream

CONDITION	NO. PATIENTS	COMPLETE REMISSION	IMPROVED	UNIMPROVED	WORSE	REACTIONS*
Seborrheic dermatitis	41	1	38	2	0	1
Neurodermatitis	33	8	22	2	1	1
Atopic dermatitis	33	3	28	1	1	2
Psoriasis	23	0	17	6	0	1
Nummular eczema	14	6	8	0	0	0
Contact dermatitis	12	9	2	0	1	1
Chronic eczematoid dermatitis	7	4	2	1	0	0
Dyshidrotic eczema	7	1	6	0	0	0
Miscellaneous	30	6	21	2	1	1
TOTALS	200	38	144	14	4	7

* Of the 7 reactions noted, 4 were so considered because the patients' condition got worse and the remaining 3 complained of a burning sensation that might have represented a tar sensitivity. The fact that a drying effect was not complained of in this part of the study proves that the adjustments in the bases were adequate to correct these effects.

ANALYSIS OF RESULTS AND COMMENTARY

Only 23 of the 336 patients studied failed to respond to treatment, a percentage that again demonstrates corticoid effectiveness in dermatoses. There were no toxic effects and few complaints of unwanted reactions. The ratio of completely remitted to improved cases (98 to 215) is consistent with the known palliative nature of the glucocorticoids. On the other hand, the number of complete remissions observed in the patients with contact dermatitis suggests an effect tantamount to a cure.

Many of the patients voluntarily expressed opinions to the effect that both the plain and tar-containing preparations were better than similar medications with which they had been previously treated. We think this preference to be due to the base, which not only is extremely well tolerated but appears also to facilitate penetration of its active components. It appears to us that the dexamethasone/tar combination is considerably superior in patients who have had experience with many preparations.

---

* Available as Hexadrol Cream.

† Available as Hexadrol Tar Cream.

Both dexamethasone and dexamethasone with tar creams were initially screened to ascertain patient-acceptance and quality of vehicle. Response data are tabulated in table 3. Of the 49 patients treated, 28 found both preparations equally effective, ten preferred the plain cream and eight the steroid/tar combination. The remaining three found neither to be effective. These preference figures are somewhat unrealistic in view of the fact that four of the ten patients preferring dexamethasone cream did so because they objected to the smell of tar, disregarding the better therapeutic effect of dexamethasone cream with tar. These patients obviously belong with the eight who preferred dexamethasone cream with tar, thus making it a 12 to six preference.

TABLE 3

Results in 49 Patients Treated with Both Preparations

CONDITION	NO. PATIENTS	COMPLETE REMISSION	IMPROVED	UNIMPROVED	WORSE	REACTIONS
Atopic dermatitis	15	0	14	1	0	7
Contact dermatitis	12	11	1	0	0	0
Nummular eczema	7	5	2	0	0	0
Neurodermatitis	3	2	1	0	0	0
Pustular bacteria	5	3	1	0	1	1
Psoriasis	3	0	1	2	0	1
Chronic eczematoid dermatitis	1	1	0	0	0	0
Lichen planus	1	0	1	0	0	1
Seborrhea	1	0	1	0	0	0
Pompholyx	1	0	1	0	0	1
TOTALS	49	22	23	3	1	11

According to our rigid criteria a drying effect was considered a reaction since it increased the amount of itching which the patient suffered, particularly during the cooler months. Suitable adjustments in the bases were then made and prevented further complaints of this type. Nine of the 11 patients listed under reactions had this drying effect. Since the trouble did not recur during the rest of the study, perhaps this should not be considered a real reaction. A finding of clinical significance was the better antipruritic effect produced by the tar-containing preparation.

CONCLUSIONS

Although the concentration of dexamethasone in Hexadrol Cream is no higher than some of the other commercially prepared products, many of our patients preferred this to other steroid creams of equal concentration. The base was extremely well tolerated, and the patients liked the preparation. As for the Hexadrol Cream with Tar, we do not know why this product should be better than others, but we have had numerous patients tell us that this preparation works better, particularly in seborrhea, than similar products. Therefore we think that the base is important.

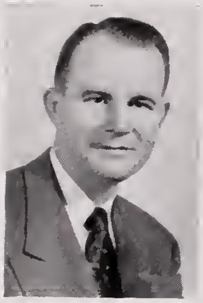
Obscure Gastrointestinal Bleeding—Latimer and Horwitz

(Continued from page 573)

6. MARSHALL, S. F., AND WELCH, M. L.: Leiomyoma of jejunum; report of case. New Engl. J. Med., 1947, **236,** 95.
7. STARK, G. F., AND DOCKERTY, M. B.: Leiomyoma and leiomyosarcomas of small intestine. Cancer, 1955, **8,** 101.
8. HUNTLEY, R. J., LAURAIN, A. R., AND STEPHENSON, W. H.: Hemorrhage from leiomyomas of gastrointestinal tract. Arch. Int. Med. (Chic.), 1960, **106,** 245.
9. JONES, F. A., READ, A. E., AND STUBBS, J. L.: Alimentary bleeding of obscure origin. Brit. Med. J., 1959, **1,** 1138.
10. RETZLAFF, J. A., HAGEDORN, A. B., AND BARTHOLOMEW, L. G.: Abdominal exploration for gastrointestinal bleeding of obscure origin. J.A.M.A., 1962, **177,** 104.

PRESIDENT'S PAGE

THE COMING ASSEMBLY



Back in 1956 when the First Interstate Scientific Assembly was jointly sponsored by the State Medical Society of Virginia and the Medical Society of the District of Columbia, there were those who had many misgivings. Here were two large organizations which had long conducted successful annual meetings of their own. The decision to consolidate their efforts was, in the minds of many, a questionable venture. Possibilities of friction were self-evident, i.e., unsatisfactory representation of each organization on committees, on the program, in the exhibits, and in social affairs.

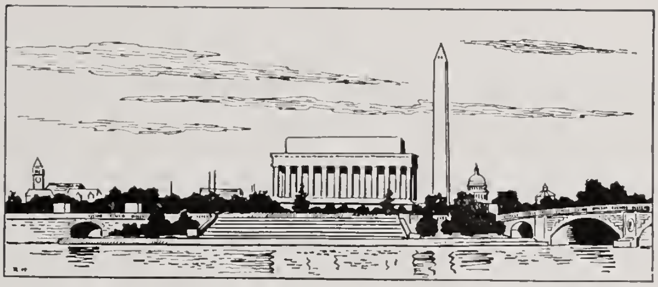
As it turned out, there was no need for concern. Joint committees worked together beautifully and saw to it that points of friction were avoided. As a result, the unique undertaking was an unqualified success.

This encouraged present leaders of both medical societies to consider the advisability of another joint venture. The decision was finally made to go ahead with the Second Interstate Scientific Assembly, which will be held at the Sheraton-Park Hotel on October 15, 16 and 17. Plans for the Assembly, which were completed by the Committee on Arrangements some time ago, give assurance that this will be another outstanding medical meeting. I wish to thank the chairmen, co-chairmen and members of the committees for their work and to assure them of my deep gratitude.

As President of the District Medical Society I want to extend a most hearty welcome to members of our sister society in Virginia. It is my earnest hope that they will profit from attending the meetings and that if their families are with them they will enjoy their stay in Washington.

I would urge all our members to attend the Assembly, not only for the knowledge they will gain, but for the opportunity of fraternizing with their colleagues from the other side of the Potomac.

J Spencer Dryden



EDITORIALS

Vaccination Against Influenza

The last week in August every Active Society member received a copy of "Recommendations for Vaccination Against Influenza in the Civilian Population." This is "must" reading for all general practitioners, internists, pediatricians, and obstetricians.

Fall is the time to begin influenza vaccination and is especially important for those of your patients who are most likely to suffer serious consequences from this disease. The "Recommendations" provide general information on influenza A_2; lists selected groups and occupations of high medical risk; and outlines procedures to be followed in the doctor's office. Any member desiring another copy of this communication may secure it by calling District 7-3111.

While influenza A_2 has not been widespread the past two seasons, recent and past patterns of incidence indicate, according to the Public Health Service, that many outbreaks will occur in the United States this coming winter. So check your patients for occupational and high medical risks and advise them of the value of vaccination.

Impressions of Moscow

To those of us from the Western World, the Eighth International Cancer Congress provided an opportunity to see many features of the largest Communist state. We explored as much of the mammoth Russian Capital as possible. The prevailing spirit was typified by one American surgeon who nightly joined the largest group of Russians he could find. In spite of language barriers (neither spoke the language of the other) he was able to make amiable contact with many Russians.

Although a ten-day visit permitted, at best, inadequate observation, certain impressions were formed. Among these are the following:

The average Russian male is short and slender. Most of the women are short and plump. Russians wear clothing of poor quality, often ill-fitting and unclean. Only occasionally an attractively dressed and well coiffured woman is seen. Except for an apparent Russian aristocratic class, the people seem poor, resigned, monolingual, uninformed of the Western World, and unambitious. They appear suspicious and quite taciturn. Amiable conversations are frequently interrupted by quick mood changes of brief duration.

Opinions expressed in contributions to the Editorial Section are those of the writers and do not necessarily reflect the views of the Medical Society of the District of Columbia

Russians point with understandable pride to their great achievements. At the same time they are intensely apologetic for shortcomings that are discovered. They congregate in large numbers in Red Square in a constant pilgrimage to the Mausoleum of Lenin. Large crowds also visit the various museums, theatres, and the Kremlin. Although most appear monolingual, and many illiterate, knowledge of Russian art, literature and theatre seems widespread. Night life appears quite limited. There are no night clubs.

It is difficult to arrange even simple matters. One may arrange for theatre tickets, an excursion, a boat ride or a visit to a hospital by leaving his name and hotel room number, and, perhaps, in a day or so permission or tickets will be granted. Changes in travel plans could be arranged only with great difficulty. Perseverance and persistence were required. Practically all tours are guided. In the case of hospital visits, the director and his interpreter served as guides. Russian hosts during these tours and hospital visits were cordial. Special concessions were made to Congress delegates.

Decision-making appears quite difficult in the Soviet Union. Confusion is obvious even in simple matters. Upon arrival at the Moscow Airport, an average of four hours per person was required before the single Intourist Agent was able to make hotel assignments and arrange for transportation to quarters. Hotel accommodations are crude. There is no room service beyond transportation of luggage. Class "A" accommodations, calling for a single room with bath, were found to mean sharing a room with someone else of the same sex, perhaps a complete stranger, with similar accommodations. Directional signs were often misleading, so that a visitor after queuing up at one desk for half an hour or so might have to queue up again in a second, and perhaps a third line.

English language students from Moscow University who wished to gain experience were available as guide interpreters in limited numbers. This service was excellent and free of charge.

The Russian people are curious about America. They want to know about our educational system, form of government, and motives. Owing to censorship of newspapers and other literature, radio and television, they are exposed only to that which is unfavorable to the West. The *Daily Worker,* the only newspaper available from the West, is often quoted as an authoritative source. The average Russian believes that America is seeking war, and that unemployment and slums are the rule in American cities. They conceive that our capitalists enslave the laboring classes in order to enrich themselves. Russian people express a desire for peace while admitting ambitions to spread Communism throughout the world. They are ignorant of the true role of their own government in the present international situation.

Children are seldom seen in the streets of Moscow. When seen, they are usually in groups being led by adults, or visiting museums, the Kremlin or Red Square.

Moscow is a huge, beautiful but monotonous city of eight million. The city radiates from the Kremlin, which is approximately central in location. The horseshoe-shaped Moscow River weaves through the city. The streets are 60 to 80 paces across, boulevard in type, and constantly being cleaned. Dividing lanes are covered by beautiful flowers, grass and wonderful green trees. The summer climate is temperate. Traffic is relatively light. Most passenger cars are state-owned taxis. One often has to walk several long blocks to find an intersection for crossing. It is hazardous crossing at other points since Russian drivers will not stop for pedestrians except at proper intersections.

The architecture is a monotonous mixture of large residential apartment houses like those in America, Byzantine gold-domed cathedrals and buildings, and the Czarist-style mansions (these are not homes today) which remain. There are six to eight skyscrapers in the city. These are each about 32 stories high with a tower surmounted by a star.

Transportation facilities consist of modern, fast subway trains, buses and taxis. Subway stations are clean and extensively decorated with statues, murals, and chandeliers. They are well lighted. Perhaps the longest and fastest escalator in the world is present in one of these stations. It is steep and more than 100 yards long. Taxis are available only at taxi stations or at your hotel. One cannot hail a taxi on the streets. The larger taxi stations are supervised by a controller. It is necessary to queue up at all, often after having walked miles in search of one.

Russian food stores are called *gastronoms*. In these one must pay first and obtain a receipt before picking up what he wishes. The abacuses, instead of cash registers, are universally used for computation in the *gastronoms*, restaurants, and department stores.

Gom's is the main department store. It is two blocks long and faces Red Square. It consists of two long, parallel buildings joined at the ends, with the space between these buildings uncovered. The store is three-tiered and composed of multiple small *kiosks*. Goods in this store, such as clothing and luxury items, are crude, inferior, and expensive by Western standards.

Russian hospitals occupy old buildings, but are clean and well lighted. One perceives a pioneer spirit. The staff members were cordial hosts. At one of their institutes, The Institute of Experimental and Surgical Instruments, a complex group of stapling instruments for pulmonary surgery, anastomoses of blood vessels, nerves and intestines was demonstrated. These instruments represent perhaps the most valuable Russian surgical contribution.

JACK E. WHITE, M.D.

The Trademark

Throughout history the trademark has been recognized both as a stamp of identification and as an incentive to quality.

In ancient Egypt a slave put his own mark on every brick so that the slavemaster knew whom to punish if one was defective. Soap-makers in Rome received stiff fines and were prevented from doing business if their products were unbranded. Flemish tapestry workers who failed to mark their products lost their right hands. In 1266 England passed a law requiring bakers to mark each loaf so that if a bad one turned up "it will be knowne in whom the faulte lies."

But now in the United States some critics of the drug industry would like to remove trademark names from prescription drugs. They hold to the theory that abolishing or minimizing the value of trademarks would greatly reduce the cost of medicines. They seem to ignore the fact that weakening the trademark system is likely to endanger quality and the public health.

Without trademarks there would be far less incentive to produce prescription drugs of outstanding quality. Furthermore, although many products sold under common names are acceptable, they are not "identical" with their trade name counterparts. The fact is that "identical" medicines—if made by different firms—do not exist. Variations resulting from differences in production methods—differences in the size of particles, in the types of binders and coatings—often cause supposedly "identical" drugs to have different effects on the patient.

With the present system of trademark names, the physician relies on the integrity and reputation of the manufacturer, and specifies by name the exact product he wants his patient to receive. In this way he knows the quality and effect of the medicine. If compelled to prescribe a drug by its common name, the physician would have no such guarantee. When human lives are at stake, inability to identify the manufacturer of drugs is dangerous.

(*Contributed*)

Your Office Assistants

Every physician knows the value of office assistants, even though they aren't always given the credit due them. They are indispensable, the first front of the physicians' image to patients and the public.

Early this year a group of these courageous women undertook to organize a local unit of the A.A.M.A. (American Association of Medical Assistants), following the lead of many similar groups in other states. The A.A.M.A. is sponsored by the American Medical Association and was approved by the Medical Society of the District of Columbia.

The growth of the A.A.M.A. has been slow here—much slower than elsewhere—and deserves, yes requires, your attention and support now. A number of other so-called national organizations are trying to organize your nurses and office assistants and are actively promoting membership. The A.A.M.A. is the only group officially recognized by the American Medical Association and your Medical Society. It will have a booth at the SECOND INTERSTATE SCIENTIFIC ASSEMBLY and regular monthly meetings at 1718 M Street this coming winter. Its officers are coöperating with the Society in arranging a dinner for doctors' office assistants later this fall. The program for a symposium, to be held October 27, appears under "Meetings" in this issue of the ANNALS.

Your coöperation in making this new group successful and representative is necessary. Talk to your nurse or nurses, assistant or assistants and urge them to join the A.A.M.A. For information call the Medical Society's Executive Offices.

Woman's Auxiliary Officers for 1962–63

MRS. JOHN E. MORRIS, President of the Woman's Auxiliary to the Medical Society of the District of Columbia, will preside this year at the meetings of the Auxiliary. Beginning in October, the meetings are held regularly in the Medical Society's library the second Wednesday of each month at 11 am. Officers serving with her are:

President-elect: Mrs. Jonathan M. Williams
First Vice President: Mrs. George W. Ware
Second Vice President: Mrs. Edgar E. Quayle
Recording Secretary: Mrs. Thomas N. Carter
Assistant Recording Secretary: Mrs. Thomas N. Foley, Jr.
Corresponding Secretary: Mrs. J. Earl Kadan
Assistant Corresponding Secretary: Mrs. Thomas H. Griffin
Treasurer: Mrs. George H. Crofton
Assistant Treasurer: Mrs. Herbert S. Gates

The manifold activities of the Auxiliary will be carried on under the leadership of the following committee chairmen:

American Medical Educational Fund: Mrs. Daniel Sondheimer
AMA Bulletin: Mrs. James W. Choate
Civil Defense and Safety: Mrs. Julius J. Radice
Community Services and Public Relations:
  Mrs. Howard A. Donald
  Mrs. Paul F. Jaquet, Jr.
Educational: Mrs. James A. Dusbabek
Finance: Mrs. Robert C. Haile
Health Careers: Mrs. Hewitt I. Varney
House: Mrs. Robert B. Havell
Legislation: Mrs. Charles E. Bickham, Jr.
Membership: Mrs. M. Noel Stow
Mental Health: Mrs. Frederick Y. Donn
Philanthropic: Mrs. E. Herbert Bauersfeld
Program: Mrs. Francis J. O'Bryan
Publicity: Mrs. Clifton R. Gruver
Social: Mrs. Harry N. Carlton
Visiting: Mrs. Russell M. Tilley
Ways and Means: Mrs. John H. Peacock

ANNUAL REPORTS

Report of the Chairman of the Executive Board

It is the responsibility of the Executive Board to manage the affairs of this Society, to recommend major policy decisions, and to carry out the policies of the Society. The last report of the Executive Board, published in the Annals, appeared in October 1961, with a supplemental report submitted in mimeograph form at the Annual Business Meeting on November 15, 1961. Therefore, while this report is primarily concerned with the actions of the Executive Board during the first eight months of 1962, it will refer in part to the last two months of 1961.

Membership

The Board of Credentials interviews all applicants for membership in the Society and will make a separate report on its activities.

In January 1962 the Executive Board conferred Life membership on ten physicians who had been Active members of this Society continuously for more than 40 years.

Amendments to the Constitution and By-Laws

On receipt of petitions received from thoracic surgeons and petitions received from general surgeons, the Executive Board has approved the establishment of Sections on Thoracic and Cardiovascular Surgery and on General Surgery. Since the creation of these two Sections requires changes in the Constitution and By-laws, proposals for such changes will be submitted to the membership at the Annual Business Meeting by the Committee on Constitution and By-laws.

Awards

The Executive Board selected Dr. Daniel L. Finucane to receive the Society's 1962 Certificate for Meritorious Service. It also approved nominees for two other awards. On the recommendation of the Committee on Public Information and Education, a special award was approved for Mr. Nate Haseltine, science writer for *The Washington Post,* in recognition of his outstanding abilities as a writer in the scientific field, and Dr. Herbert P. Ramsey was chosen as the 1962 recipient of the A. H. Robins Company's Community Service Award.

Membership of Section Officers

During the year the question arose as to the type of membership which should be required of Section officers. Although the Constitution and By-laws are not specific in this regard, the Executive Board believes it was the intent that only Active and Life members should hold offices in the Sections. This was therefore established as a policy of the Society.

Proposed Changes in AMA Disciplinary Procedure

The Executive Board reviewed the proposed changes in the AMA Constitution and By-laws (Chapter 4) relating to a change in the jurisdiction of the AMA in disciplinary matters. These read as follows:

> "Section 1. Original Jurisdiction. The American Medical Association, in those instances in which local action has not or cannot be taken, may, after due notice and investigation, and in accord with published rules, bring action before the Judicial Council against an Active, Associate, Service, Affiliate, or Honorary Member of the American Medical Association for violation of the Constitution and By-laws or for a violation of the Principles of Medical Ethics of the American Medical Association or for a violation of the ethical policies of the Association; and the Judicial Council may censure, suspend, or expel any Active, Associate, Service, Affiliate or Honorary Member found guilty of such a violation.
>
> "Section 2. Appeals. In all controversies between a Member and his component society or constituent association, an appeal may be made to the Judicial Council on questions of law and procedure only, but not of fact. Notice of appeal shall be filed with the Judicial Council within thirty days of the date of the decision by the constituent association, and the appeal shall be perfected within sixty days thereof; provided, however, that the Judicial Council for what it considers good and sufficient cause, may grant an additional thirty days for perfecting the appeal."

The Executive Board approved these proposed amendments to provide guidance for the Society's delegates to the AMA at the June 1962 Session.

BLUE SHIELD SENIOR CITIZENS PROGRAM

The Committee on Medical Care considered at length the proposed national Blue Shield Program for Persons Over 65, and opposed it as inadequate, urging the Executive Board to give serious consideration to its provisions. The Executive Board reviewed carefully both the provisions of this Plan and the background leading to its development.

As you know, our Society has taken active leadership in urging the AMA to do more and to be more active in promoting nonprofit voluntary health insurance. The AMA Board of Trustees has seen fit, in this instance, to take action by endorsing a Nationwide Blue Shield Program for Senior Citizens. To the Executive Board, disapproval of this new Blue Shield Program, even though it is not entirely adequate, would leave the Society in the paradoxical position of seeming to abandon the principles for which it has stood for many years.

The Executive Board, therefore, endorsed the National Association of Blue Shield Plan's National Medical Care Prepayment Program for Persons Over 65, with the understanding that every effort be made to broaden the benefits so that it will more adequately meet the needs of the aged.

POLIO IMMUNIZATION

The availability of the new Sabin oral polio vaccine (Types I, II and III) made it feasible and desirable to endorse a recommendation of the Poliomyelitis Committee that the Medical Society approve and coöperate in a community-wide immunization program. The program scheduled is designed to provide the three types of vaccine approximately one month apart, with Type I on Sunday, October 7; Type III on Sunday, November 18; and Type II on Sunday, January 13.*

The Committee on Poliomyelitis has worked closely with Dr. Frederick C. Heath and other Health Department personnel in developing instructions for physicians and the public so as to make maximum use of this program. However, funds available from the Health Department budget were sufficient to provide immunization for children only. Therefore, again on recommendation of the Poliomyelitis Committee, the Executive Board approved a voluntary contribution of 25 cents or more per person immunized as a proper and necessary method to supplement the money presently available so that immunization may be available to adults as well as children. Following this community immunization program, it is urged that physicians make every effort to complete immunization of all District residents through their office practice and to continue such protection on an individual basis.

REHABILITATION

One of the major recommendations contained in the Rehabilitation Study made by this Society in 1960 related to the creation of a Central Information Center. Such a center would be for the convenience of physicians and others concerned with rehabilitation to permit them to make maximum use of facilities and services already available. On recommendation of the Committee on Rehabilitation, the Board voted to support this project with $300 annually over a three-year period.

BLOOD BANKS

Problems surrounding the supplying of blood to and through local hospitals were presented on various occasions to the Executive Board by representatives of the Committee on Blood, the Section on Pathology and Laboratory Medicine, the Red Cross, and various hospitals. A Subcommittee on Blood was appointed to study the blood supply situation. The recommendations of this Subcommittee were approved by the Executive Board, including the assurance that two members of the Committee on Blood would actually be engaged in the "hospital blood bank business." The Executive Board also endorsed the Metropolitan Washington Blood Service Plan of the Metropolitan Washington Blood Banks, Inc.

The Committee on Blood has continued its review of blood problems in the Metropolitan Area and has made specific suggestions relating to the program of the Red Cross to make it more acceptable to local hospitals.

It is evident to the Executive Board that problems of blood banking and blood supply are not yet resolved and it will be necessary to make further reports on this at future meetings.

---

* This program was postponed because of the Canadian experience with Type III vaccine.

HEALTH-USA AWARD

The Executive Board again agreed to act as co-sponsor of the Health-USA Award for 1962, with the proviso that a permanent organization be established to plan and continue this project. Furthermore, since this is a local rather than a national award, it seems to the Board that it should either be planned as a Nationwide event or the title be changed to District of Columbia Health Award.

AMERICAN ASSOCIATION OF MEDICAL ASSISTANTS

Early this year a group of doctors' assistants indicated an interest in and a desire to organize a Washington Chapter of the A.A.M.A. This group conferred with the Committee on Public Information and Education and, with this Committee's consent, has had several meetings in the Society headquarters.

The Committee approved a Constitution and By-laws for a local chapter of A.A.M.A. and, on recommendation of the Committee, the Executive Board also endorsed this new organization and its Constitution and By-laws. Since several private groups have been trying to organize doctors' office assistants and have been engaged in Nationwide promotion, the Executive Board urges the Society members to consider suggesting to their office personnel that they join the A.A.M.A., which is endorsed and promoted by the A.M.A. as well as the Medical Society of D. C.

VENEREAL DISEASE OF MINORS

The Committee on Public Health reported that because of a ruling by the Corporation Counsel of the District, the Department of Health could not treat minors for venereal disease without the consent of parent or guardian and that this had resulted in some patients with an active disease going without treatment. On the recommendation of this Committee, the Executive Board approved in principle a proposed amendment to the Communicable Disease Act to permit treatment of minors who are willing to accept it and approved a statement of policy for the guidance of physicians working in Venereal Disease Clinics until such time as such an amendment can be effected.

MENTAL HEALTH BILL

On recommendation of the Committee on Mental Health, the Executive Board disapproved S.2809, a Bill to Establish a Code of Law for the District of Columbia relating to individuals acquitted of offenses solely by reason of insanity. However, the Board requested the Committee to continue its study of this subject especially as it relates to crime in the District.

OPTOMETRY ACT FOR 1962

On recommendation of the Section on Ophthalmology, the Executive Board approved this proposed legislation with revisions suggested by the Section. However, the Board did not approve the appointment of a physician to the Board of Optometry.

PREMARITAL EXAMINATION

On the recommendation of the Committee on Public Policy, the Executive Board disapproved H.R. 11566, which would require a physical examination and certain tests before the issuance of a marriage license. However, the Committee was requested to consider the proposal of legislation requiring prenatal serologic tests for syphilis.

SAFE DRIVING LEGISLATION

On the recommendation of the Committee on Public Policy, the Executive Board disapproved a request "to initiate legislation to require doctors to report on cases of alcoholism addiction as well as diabetes, epilepsy, heart disease and other malfunctions which would render a person incompetent to safely operate a motor vehicle."

On the recommendation of the Committee on Public Policy, the Executive Board endorsed H.R. 10189, a Bill to Promote Safe Driving and Eliminate the Reckless and Irresponsible Driver from the Streets and Highways of the District of Columbia by providing that any person operating a motor vehicle within the District while apparently under the influence of intoxicating liquor shall be deemed to have given his consent to a chemical test of certain body substances to determine the alcoholic content of his blood, and for other purposes.

The key provision of this bill is "Every person operating a motor vehicle within the District shall be entitled to do so only on condition that he will submit to a chemical test to determine whether he has consumed an excessive amount of intoxicating liquor, if it should appear to a police officer arresting such a person for a violation of law that such operator is under the influence of such liquor; and that every person operating a motor vehicle within the District shall be presumed to have given his consent to such a test."

Homemaker Services

One of the problems encountered in trying to reduce the length of stay in hospitals is a lack of trained individuals to provide services in the home. This is particularly true where the patient is a mother with young children. Many areas have developed programs for training homemakers who can be employed for this purpose. As a result of a study of this type of service by the Committee on Public Health, the Executive Board endorsed Homemaker Services and urges that physicians take advantage of such services for their patients.

Finances

The Executive Board reviews the income and expenses every three months and approves all major expenditures. Financial records of the Society are audited by Wayne Kendrick and Co. at the close of each calendar year. A condensed financial statement will be published in the Annals early in 1963.

Administrative Changes

Although the Executive Board had been aware for some time of "Ted" Wiprud's decision to resign as Executive Director, it accepted the inevitable with great reluctance. The fine turnout at the Theodore Wiprud Testimonial Dinner and the many wonderful words of tribute to "Ted" expressed at that time need no garnishing here, except to say we all wish him the best in his new position with the Medical Service Plan.

The Executive Board also was reluctant to accept the resignation of "Larry" Zupan, who for twelve years has rendered valuable service to all of us. A Certificate of Appreciation was given to "Larry," and to this the Executive Board knows the members would wish to add "best of luck" to him in his new position.

To succeed "Ted," the Board selected George Cooley, whose background for the position is known to all of you by way of reports in the Annals. The Board is confident Mr. Cooley will carry on the many duties and tasks assigned to him to the satisfaction of the Society and its members. We know he will welcome your suggestions and assistance and urge each of you to make yourself known to him.

Respectfully submitted,
James W. Watts, M.D.
Chairman, Executive Board

Report of the Board of Credentials

From September 1, 1961 to September 1, 1962 the Board of Credentials interviewed 48 applicants for Active membership, 21 for Associate and one applicant for Affiliate. All 70 applicants were recommended to the Executive Board for election to membership in this Society for a one-year probationary period.

The Board of Credentials, which is an elective body, screens applications for membership in the Society and personally interviews each applicant.

When an application is received it is announced by letter to all Active and Life members with the request that if they have any comments concerning the applicant, these be forwarded to the Board of Credentials. Within two months from the date of sending this letter, applicants are interviewed. Following this interview, the recommendations of the Credential Board are made to the Executive Board.

The Board of Credentials is continually impressed with the quality of young physicians who select the District of Columbia as a place to practice. Each new group seems to have longer and better training. This year's group is no exception and should be a valuable asset to the Society's membership.

Respectfully submitted,
Edward W. Nicklas, M.D., *Chairman*
William A. Howell, M.D.
Luther W. Gray, M.D.

Report of the Secretary-Treasurer

Stepping into the position so ably filled by your former Secretary-Treasurer, "Ted" Wiprud, is not an enviable task. Yet, even with this short period of indoctrination, the fine calibre of the Society's membership, both as physicians and citizens, is clearly evident. As Executive Director, Secretary, or Treasurer, it will be my task, with the coöperation of other staff personnel, to serve you individually and as members of a Society which devotes much of its effort to the public interest of the District of Columbia. In this first report to the membership a brief review will be made of the organization, operation, and activities for which staff is primarily responsible.

Membership

The membership of the Society seems to have reached a plateau where any future increase may be small. The following figures show membership totals for the past three years:

Membership on September 1	1960	1961	1962
Active	1,473	1,485	1,505
Life	64	63	70
Affiliate	36	39	39
Associate	580	592	599
Honorary	27	27	30
Resident-Intern	32	27	17
Totals	2,212	2,233	2,260

Any sizable increase in Active members would require a change in policy of the Society toward physicians not in private practice and possibly in reference to licensure, since the District has an unusual number of physicians in full-time positions.

Staff

At first glance the number of staff members seems large compared to most state associations. However, this Society serves as both a county society and state association. Of the 44 staff members, 32 serve the Medical Bureau, full-time or part-time; only 12 devote full time to what might be considered the usual Medical Society activities, including publication of the Annals.

All of you are well aware that replacing "Larry" Zupan was almost as difficult as replacing "Ted." I am confident, however, that the new Assistant Executive Director, Mr. Fred Trust, will learn and grow in experience to the benefit of the Society and its members. He is willing and able and has approached his assignments with a desire to be of the most possible service. Much credit is also due to Miss Eckburg, of the Annals, Miss "Mac" of the Bureau, Miss Ryder, Mrs. DeBray, Mrs. Vaughn, Mrs. Caylor, and other staff members who serve you, and your Secretary, so well and with real dedication to their tasks.

Scientific Programs

The 1961 Scientific Assembly was attended by over 2,100 physicians and guests. The program was unusually attractive and brought many spontaneous comments of approbation.

Plans for the 1962 Assembly, the Second Interstate Scientific Assembly, sponsored jointly by the Medical Society of D. C. and the Medical Society of Virginia, are complete. Since this Assembly will be held in October, it will have been completed prior to publication of this issue of the Annals.

The Tenth Midwinter Seminar was held on February 12, 19 and 26. This Seminar, held on three consecutive Monday evenings, brought together national experts in the care of older patients. Despite the quality of the speakers and timeliness of the subject, it was not well attended. The increased specialization within medicine seems to make it continually more difficult to put together a program which will attract a substantial number of physicians. Whether more than one postgraduate program on specific medical surgical problems would be more productive is yet to be determined. Further, to reduce the number of meetings and develop a coördinated postgraduate education program for practicing physicians the Executive Board has requested the Committee on Postgraduate Education to confer with the Deans of the Medical Schools. These and other related problems will confront the Committee on Postgraduate Education at its next meeting.

FINANCIAL RESPONSIBILITIES

The Secretary-Treasurer, under the direction of the Executive Board and its Finance Committee, is responsible for the financial administration of the Society. The Finance Committee reviews expenditures each month and the Executive Board receives a quarterly report on income and expenses. Prior to the Annual Business Meeting an estimated budget for the coming year is submitted to the Executive Board and, in turn, to the membership at this meeting.

MEDICAL ANNALS

The quality of the scientific articles continues as in the past years. Dr. Wallace M. Yater, Editor, and Miss A. Louise Eckburg, Assistant Editor, are seeking to build up a backlog sufficient to permit the planning of the ANNALS several months in advance. Arrangement of text space could then be made to conform with potential advertising, thus maintaining a constant balance between the two.

The limited staff of the ANNALS results in constant pressure to complete all necessary tasks within the time schedule. To ease this pressure, it is hoped the Managing Editor and other Society staff members can assume some of the advertising and publishing responsibilities.

It is hoped, too, that this additional assistance will help to reduce the financial loss of the ANNALS. Although the Society has always subsidized the ANNALS, the decrease in advertising and increase in printing costs have resulted in a serious difference between income and expense.

MEDICAL BUREAU

The task of directing the MEDICAL BUREAU within policies developed by the Medical Bureau Committee and approved by the Executive Board is one that does not occupy a significant portion of the Secretary's time. However, the time element cannot be planned and the BUREAU may require attention any time of the day or night.

BUREAU membership, as with Society membership, seems to have reached a maximum level. Last year at this time 784 physicians were subscribers (491 with Secretarial Service and 293 with Alternate Listing) compared with 786 this year, of which 511 have a direct line and 275 have an alternate listing.

An analysis of calls handled in 1960 and 1961 reveals:

	1960	1961
Messages taken for physicians	249,208	267,934
Calls required to reach physicians	219,462	229,905
Emergency calls (for patients with no physician)	3,850	3,273
Calls required to reach physicians in emergencies	5,076	4,663
Instructional calls from physicians	173,131	188,682
Referrals where names of three physicians are given in rotation	25,322	27,043
	676,049	721,500

With over 700 physician-members and with the handling of over 700,000 calls, it seems evident that the BUREAU is not without its problems. The operators do make mistakes, and some complaints, often legitimate, are received from both physicians and patients. Considering the volume of calls, however, it is amazing that more errors do not occur. Despite imperfections the MEDICAL BUREAU is an invaluable service to physicians as well as to patients and the public at large.

COMMITTEE MEETINGS

The Executive Director or his Assistant is not required to attend all committee meetings, but one or the other does serve and attend most meetings to record minutes and learn of material required for subsequent meetings.

During the first eight months of 1962, 32 committees of the Society met on 60 occasions. Committee activity is the backbone of a medical society. It may be slow and cumbersome at times but, so far, it is the only proved method of association operation. Actually, as in any endeavor, those who participate and contribute the most receive the most. Committee membership can be work, but it can also be rewarding. Each fall the President-elect must select committee members. If you have a special interest, let him know.

Respectfully submitted,
GEORGE W. COOLEY
Secretary-Treasurer

CANCER of the BLADDER . . . .

GROWTHS OF THE *URINARY BLADDER* ARE MALIGNANT OR POTENTIALLY SO

Papillomas may become malignant and most will cause much trouble from hemorrhage, obstruction and infection.

SYMPTOMS requiring a careful history, thorough physical examination, and a urinalysis are:

1. Gross hematuria
2. Unexplained vesical irritation
3. Unexplained frequency of micturition
4. Unexplained mild burning and difficulty in voiding
5. Persistent urinary infection

If the above symptoms remain unexplained after a thorough examination then special diagnostic procedures for the evaluation of the urinary tract as a whole should be started.

Carcinoma of the urinary bladder.
Notice the dilated left ureter due to obstruction by the tumor.

Sound THERAPY depends upon ACCURATE DIAGNOSIS

RESEARCH
EDUCATION
SERVICE

A film, "Cancer of the Urinary Bladder" is
available for showing to physicians.

Call or Write

American Cancer Society
District of Columbia Division, Inc.
810 18th Street, N.W.
Washington 6, D.C.
EXecutive 3-3690

Military Service of Physicians

Recourses Available to Lessen Impact on Hospital Staffs and Civilian Communities in Excerpts from a Memorandum from Dr. F. J. L. Blasingame, Executive Vice President of the American Medical Association

During 1961 three Selective Service calls for physicians were issued—the first such calls for several years. They were made necessary by a decrease in volunteers and an increase in the numbers required by the Armed Forces as a result of the mobilization program. This increase in requirement was obtained by:

1. Discontinuing the acceptance of resignation of Regular Officers.
2. Denying release of those Reserve Officers who had voluntarily extended their active duty for an indefinite time.
3. Selective Service call-up of 1,025 physicians.
4. Call to active duty of National Guard and Reserve Units with medical officers attached.

Because physicians, dentists and other medical specialists, generally speaking, are liable for military service until age 35, and because they may be called as a special group, they were given the following considerations:

1. Those in a Reserve status who were called as filler personnel on or after September 1, 1961 and who had completed at least 21 months' previous active duty were given the opportunity to be released shortly after the activation of the unit.
2. Those Reserve Officers on active duty serving only their required two years were released at the end of their tour.

The physicians called up by Selective Service were those in the youngest group who had completed their internship. This group, therefore, included almost exclusively first-year residents and physicians just beginning private practice. Since the call was based on age it was not evenly distributed and some hospital training programs suffered a depletion of their first-year residents while others were untouched.

Because of the possibility of future Selective Service calls for physicians in time of crisis it would be well to consider the measures which are available to ameliorate the effect on hospital staffs and civilian communities. These are:

1. *Appeal of classification.* Shortly after completion of internship, physicians are normally classified by Selective Service in Class 1-A. An appeal may be made within ten days after receipt of this classification by filing with the local board a written notice of appeal. If the physician is located in an area other than that covered by his local board he may request that his appeal be submitted to the appeal board having jurisdiction over the area where he resides.
2. *Request for determination of essentiality.* A physician who receives a Selective Service induction notice may, if he is essential to his community or hospital and if his essentiality can be documented, request a determination of such essentiality from his local or State Selective Service Advisory Committee. Copies should be sent to the advisory committee where he is located if this is different from the committee governing the area of the board where the physician is registered. Such a request may also be directed to the National Advisory Committee to the Selective Service System, Washington, D. C.
3. *Delay in reporting to active duty.* Physicians who have received induction notices and have been commissioned may apply to the Armed Service in which they are commissioned for a delay in reporting to their duty station. Such request must be supported by evidence of essentiality or severe personal hardship.

For those physicians who do not wish to subject themselves to the uncertainties of the draft, the Armed Forces Physicians' Appointment and Residency Consideration Program (Berry Plan) provides for a reserve commission with entry on active duty at one of the following times:

1. Immediately upon completion of internship.
2. As late as one year following internship.
3. Upon completion of residency training in specialties required by the Armed Forces.

Application may be made for participation in this program early during the intern year. Acceptance into any of the three categories is dependent upon the projected needs of the Armed Services.

Report on International Cancer Congress in Moscow

The Eighth International Cancer Congress, sponsored by the International Union Against Cancer, convened in Moscow, U.S.S.R., July 22–28, 1962. Approximately 5,000 medical scientists, representing 70 nations, attended. Included were more than 600 doctors from the U.S.A. The Congress permitted the exchange of research data, clinical findings, and ideas between the leading scholars in the field of oncology.

The scientific sessions, held at Moscow University, were well attended. The sessions were adversely affected by gaps in the translations, late assignment of speaking dates to participants, and too many papers, resulting in presentations too brief to be of value. On the credit side were many important research disclosures. Among these were the following:

1. Dr. Jean Maisin, of Louvain, Belgium, reported the induction of immunity to the production of experimental cancers in 50 per cent of animals pretreated by the injection of microsomal extracts of experimentally-induced tumors.
2. Reticular tumors in mice were induced by repeated antigenic stimulation via intraperitoneal injections of bovine serum albumin, Salmonella flagellar antigen and saline. Dr. D. Metcalf, of Melbourne, Australia, who reported this research, believes that foreign antigens of reticular tissue may be etiologically important in some cases of leukemia and reticulum-cell sarcoma.
3. Reports by Urban of New York, Caceres of Lima, Peru, and Chin Hisen-Chai et al of the Chinese Peoples Republic seemed to indicate a 10 to 15 per cent higher five-year cure rate in mammary cancer patients treated by extended radical mastectomy (including internal mammary node dissection) over the cure rate achieved with standard Halsted radical mastectomy.
4. In a major Congress address, Dr. Leo Alexandrovich Zilber, of Moscow, presented a theory of viral carcinogenic activity which he synthesized from existing knowledge on the subject. He believes that there are two steps in the process: (1) Normal cells are genetically transformed into cancerous cells by viral DNA. This step is unaccompanied by clinical manifestations. The presence of the virus is essential only at the time of initiation of the process. Later the virus may no longer be found in the tumor. (2) Reproduction of the new cells (cancer cells) results eventually in the development of clinical cancer. Dr. Zilber believes that radiation and chemical carcinogens may act by altering the system which regulates the use of DNA. The alteration inactivates a "repressor" factor permitting latent viral nucleic acids in the cell to affect the genetic transformation.

The social program of the Congress included an evening boat ride on the Moscow River, an opening session in the New Kremlin Congress Palace, followed by an excellent concert of classical music and ballet, and a delightful, highly informal closing party. The latter was also held in the New Kremlin Congress Palace. Excellent wines, champagne, and caviar were served in abundance. Gaiety and camaraderie prevailed.

Jack E. White, M.D.
Associate Professor of Surgery,
Howard University College of Medicine;
Director, Cancer Clinic, Freedmen's
Hospital

Clinical Center Study of Glycogen Storage Disease

The continued coöperation of physicians is requested in the referral of patients with glycogen storage disease for a study currently in progress at the Clinical Center, National Institutes of Health, Bethesda, Md.

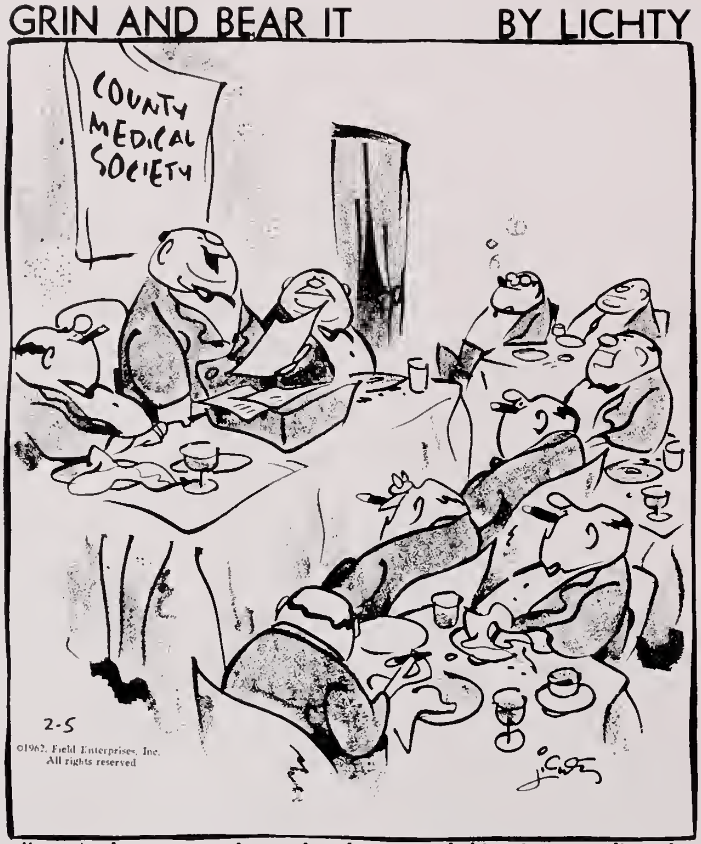
Patients known or suspected of having one of the forms of glycogen storage disease are needed for further study of metabolic errors leading to this group of disorders and for the elaboration of methods for the prevention and treatment of these conditions.

It is desirable that the diagnosis be established by means of enzymatic assays of liver and muscle tissue obtained by surgical biopsy. However, patients who fit the clinical criteria for diseases due to deposition of glycogen but who have not had a biopsy taken, will also be considered.

In Type I* due to glucose-6-phosphatase defi-

---

* Based on the classification by Stetten, DeW., Jr., and Stetten, M. J.: Glycogen metabolism. Physiological Reviews, 1960, 40, 505



"... And no sooner do we develop a good thing in extending the life span, than the government wants to get into the medical-care-for-the-aged business!"

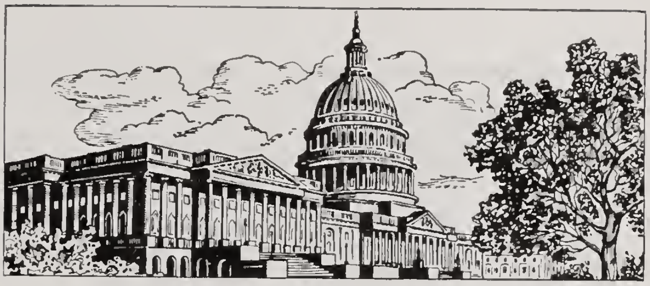
(Courtesy, George Lichty, Field Enterprises, Inc., Sun-Times Daily News Syndicate.)

ciency (von Gierke's disease) there is hepatomegaly, hyperlipemia, hypoglycemia, and no increase in blood sugar after injection of epinephrine or glucagon. In Type II (Pompe's disease, cardiac glycogen storage) the main expression of the disease is cardiomegaly, and at times amyotonia. A muscle biopsy may lead to the correct diagnosis. In the types due to absence of debranching enzyme Type III (Cori's disease) and to deficiency of liver phosphorylase (Type VIa, Her's disease), marked hepatomegaly is the principal clinical feature. The epinephrine tolerance test may show a rise in blood sugar. The type due to deficiency of muscle phosphorylase (Type VIb, Schmid and Mommaerts) has been found (to the present time) only in adults and leads to severe limitation in physical activity and excessive glycogen deposits in striated muscle.

New types of glycogen storage disease due to other enzymatic defects will undoubtedly be found if a careful search is made for them. Striking hepatomegaly, cardiomegaly, or muscular weakness in varying combinations should raise the question as to glycogenosis.

Hospitalization for a variable period should be anticipated for the carrying out of studies required. Upon completion of their study, patients will be returned to the care of their referring physicians, who will receive a complete narrative summary and report of the findings.

Physicians interested in having their patients considered for admission to this study should write to Dr. Paul A. di Sant'Agnese, National Institute of Arthritis and Metabolic Diseases, National Institutes of Health, Bethesda 14, Md.



NEWS & PERSONALS

Meetings

The Annual Business Meeting of the Medical Society of the District of Columbia will be held in the Society's auditorium, Wednesday, November 14, at 8 p.m. Reports to be submitted for approval appear in this issue of the MEDICAL ANNALS. Officers for 1963 will be elected. All Active and Life members are requested to attend.

There will be a seminar concerning **Urinary Calculus Research and Urological Training and Research Programs** at Washington, D. C., November 29, 30 and December 1, 1962, which is being planned coöperatively by the Research Committee of the American Urological Association, the National Research Council, and the National Institutes of Health. Most of the overhead involved will be underwritten in the form of a grant from NIH. The day sessions will be held in the auditorium of the Medical Society of the District of Columbia. There will be two evening conferences at the Mayflower Hotel.

These sessions will be attended by the chiefs of Urological Training Programs and a limited number of members of the American Urological Association.

This seminar has been arranged by Dr. William P. Herbst, who is Acting Chairman of the Research Committee of the American Urological Association.

The D. C. Chapter of the American Association of Medical Assistants will convene on Saturday, October 27, in the Medical Society Building for an all-day symposium. The D. C. Division of the American Cancer Society is sponsoring the symposium under the theme, "A Medical Assistant Looks at the Cancer Problem." Registration will open at 9:15 a.m. Both members and nonmembers of A.A.M.A. are urged to attend this informative meeting.

Mrs. Eller Clohessy, President of the D. C. Chapter, will be present to introduce the first speaker, Dr. George William Ware, Clinical Instructor of Surgery (Thoracic) at Georgetown University School of Medicine. He will speak on "Lung Cancer." Following his talk there will be a film, "Is Smoking Worth It?" The second morning speaker will be Dr. Stafford W. Hawken, Clinical Professor of Obstetrics and Gynecology, also of the Georgetown faculty; his subject will be "Cancer of the Female Tract."

In the afternoon session there will be two speakers. Dr. Ralph M. Caulk, Chairman of the Department of Radiology at the Washington Hospital Center, will discuss modern methods of radiotherapy. The many services available to cancer patients will be described by Helen M. Roger, R.N., Service Director of the D. C. Division of the American Cancer Society.

Dr. C. Willard Camalier, Jr., Washington surgeon, will be the principal speaker for the Chapter meeting on November 1.

SECOND ANNUAL DAVIDSON LECTURE
ON RELIGION AND MEDICINE
Lecturer:
ERICH LINDEMANN, M.D.
Professor of Psychiatry
Harvard Medical School
Medical Society Auditorium
Thursday, November 8, 1962—8:15 p.m.
Physicians, Clergymen and guests invited

General News

Dr. Murray Grant, Health Officer of Prince Georges County in Maryland, has been selected by the District Commissioners to serve as **Director of Public Health for the District of Columbia,** and assumed his new duties on September 28. The position had been vacant since Dr. Daniel L. Finucane retired last March.

MURRAY GRANT, M.D.
New Director of Public Health for D. C.

Dr. Grant, of English parentage but an American citizen since the fifties, received his medical degree from St. George's Hospital Medical School, affiliated with the University of London Medical School, in 1949. Immediately after graduation he left England for Canada to intern at the University of Toronto. He received his doctorate in Public Health from this University.

Public health has been a lifelong interest of Dr. Grant. He began his career in this field as Assistant Health Officer for Baltimore County, Maryland. In December, 1951 he became Commissioner of Health for Cattaraguas County, New York. From there he went to Clay County, Missouri, outside Kansas City, where he served as Health Officer from 1955 to 1957. Returning to Maryland in 1957, he became Assistant Health Officer of Prince Georges County, and in 1959 was appointed Health Officer. He has won wide recognition for his efficient administration of the Prince Georges Department of Health.

Dr. Grant is certified by the American Board of Preventive Medicine and Public Health. He is Special Lecturer on Public Health Practice at George Washington University School of Medicine, Lecturer in Public Health at the Johns Hopkins University School of Hygiene, and Lecturer in Public Health at the Catholic University School of Nursing.

Members of the Medical Society are cordially invited to attend **meetings of the Society's Obstetrical Board** which are held on call the third Monday of the month at 8:00 p.m. in the Medical Society's auditorium. Dr. C. K. Fraser, Chairman of the Board, suggests that interested physicians telephone the Society's Executive Offices (District 7-3111) and leave their name and address with Mrs. Evelyn DeBray of the Circulation Department.

Dr. Wallace Lane Chan, who was named to the office of Director of Investigations in the Public Health Service when it was newly established in June 1962, tendered his resignation, effective September 8, to become Vice Chancellor for Research and Development of the University of California at Davis.

Dr. Chan, a native of San Francisco, was with the Federal Service in Washington, D. C., from 1953 to 1957, and during the last year was a member of the faculty of George Washington University. He left Washington to become Assistant Clinical Professor of Medicine at Stanford University, and from 1957 to 1961 also served as Executive Research Director of the Medical Sciences Research Foundation at Stanford. He came to the Public Health Service in 1961 as Special Assistant and staff advisor to the Deputy Surgeon General.

Dr. James L. Goddard, who has been chief of the medical program of the Federal Aviation Agency since July 1959, has been **appointed chief of the Communicable Disease Center,** an arm of the Public

Health Service, in Atlanta, Georgia. He took up his new duties in September. He replaces **Dr. C. A. Smith,** who has been named **Associate Chief of the Bureau of State Services** for community health activities, with offices in Washington, D. C.

Miss Josephine J. Albrecht, who was Secretary to the Medical Society's Council on Rehabilitation from 1956 to 1959 during its survey of rehabilitation facilities of the Washington Metropolitan Area, has accepted a position as field representative for the National Society for the Prevention of Blindness, with offices in New York City at 16 East 40th Street.

Personals

Dr. A. Magruder MacDonald, who retired, August 31, as Coroner for the District of Columbia, received a citation from Mr. G. M. Thornett, Secretary to the D. C. Board of Commissioners, on September 7. The citation was given to Dr. MacDonald in recognition of his 43 years of service to the people of the District, and states, in part, that his record "is replete with the plaudits of members of the legal and medical professions . . . government and civic leaders, and other citizens of the community . . . ."

Dr. MacDonald, who is among the many distinguished graduates of old Central High School, is a medical alumnus of George Washington University, Class of 1915. Appointed Deputy Coroner for the District of Columbia in 1928, he was advanced to the post of Coroner in 1934. He was President of the Medical Society of the District of Columbia in 1942-43, and in 1951 received the Society's Certificate for Meritorious Service.

Along with his duties as Coroner, Dr. MacDonald has maintained a private practice, for many years in the Northeast Section of Washington, but, in more recent years, at 1746 K street, N.W. He is also Chief of Staff at the new Sibley Hospital. In an editorial fittingly entitled, "Farewell to a Coroner," *The Evening Star* regretted, in behalf of "every newspaper man in Washington for the past 40 years," the retirement of "A. Magruder MacDonald, Coroner Extraordinary, . . . a man of such stature that Congress, though occasionally questioning the validity of the coroner system, never saw fit to change it."

CORONER MacDONALD CITED BY COMMISSIONERS

Dr. A. Magruder MacDonald (left), retiring Coroner for the District of Columbia, accepts a citation from Secretary Thornett of the D. C. Board of Commissioners, September 7. Present to express approval at both his retirement and citation is his lovely wife, Mrs. MacDonald.

Mr. Theodore Wiprud, who retired as Secretary of the District Medical Society on June 30, assumed new, part-time duties, September 19, as Special Assistant to the Executive Vice President of Medical Service of the District of Columbia.

Dr. John A. Kenney, Associate Professor of Dermatology at Howard University College of Medicine, is the new President of the National Medical Association. He took office, August 17, during its annual convention in Chicago.

Dr. Kenney, a graduate of Howard University College of Medicine, received his specialty training in dermatology at the University of Michigan Hospital, 1950 to 1953. He is Board-certified in dermatology.

Dr. David H. Kushner was elected Chairman of the Admissions Committee of the International Fertility Association during the Fourth World Congress on Fertility and Sterility, which was held in Rio de Janeiro, Brazil, from August 8 to 15.

Dr. Benjamin F. Dean, Jr. was appointed Chairman of the Board of Police and Fire Surgeons, August 29. He succeeds the late Dr. John A. Reed, who had held the office for many years. Dr. Dean has served as Acting Chairman of the Board since the death of Dr. Reed, June 7. Associated with the Board since 1941, Dr. Dean served as a part-time member until 1959, when he became Vice Chairman, one of the two full-time positions.

BENJAMIN F. DEAN, JR., M.D.
Chairman, D. C. Board of Police and Fire Surgeons

Dr. Dean, a graduate of George Washington University School of Medicine, also holds a Master of Science degree in general surgery from the University of Minnesota. A Fellow of the American College of Surgeons, he is on the attending staff of George Washington, Children's, and D. C. General Hospitals, and the Washington Hospital Center. He has been a member of the teaching staff of George Washington University since 1930 and Assistant Clinical Professor of Surgery since 1941. He is also University Surgeon.

Dr. Otis R. Farley, director of the Medical and Surgical Branch of St. Elizabeths Hospital, was advanced to membership in the American College of Hospital Administrators at its 28th Annual Convocation Ceremony, September 16, in Chicago. The College, now in its 29th year, was founded for the purpose of providing recognition to men and women who are doing outstanding work in their professional careers as hospital administrators.

Medical Seminar Cruise

A POSTGRADUATE MEDICAL SEMINAR will be held aboard the Holland-American Line Flagship, *S.S. Rotterdam,* during a 15-day cruise to Caribbean ports, January 5 to 20, 1963.

Dr. Wallace M. Yater is Dean of the Seminar's faculty, which also includes Drs. Neville Connolly, Darrell C. Crain, Frank Finnerty, Sol Katz, Richard Manegold, William McKelway, M. Noel Stow and James W. Watts. Classes will be held on the eight days the ship is at sea.

The *Rotterdam,* which was commissioned in 1959, is one of the most luxurious ships afloat. Completely air-conditioned, it is ideal for a tropical winter cruise. Ports of call include St. Thomas in the Virgin Islands; LaGuaira, Venezeula; Curaçao, Dutch West Indies; Cristobal in the Canal Zone; Kingston, Jamaica; and Nassau in the Bahamas.

Further information regarding staterooms and the cruise can be secured from the Allen Travel Service, 565 Fifth Avenue, New York, N. Y. They are the sole agents for the cruise and hold all staterooms.

Information regarding the Seminar and registration blanks can be secured from Dr. Darrell C. Crain, 1150 Connecticut Avenue, N. W., Washington 6, D. C., Cruise Registrar.

World Cruise for Members

AN "AROUND THE WORLD TOUR" for members of the Medical Societies of Maryland and the District of Columbia, with an itinerary planned to coincide with the General Assembly of the World Medical Association in New Delhi, India, November 1–16, 1962, was announced in the May ANNALS. Brochures were also mailed to all of the members in the District of Columbia.

The tour leaves Friendship Airport, Baltimore, Md., November 3 and returns to Friendship Airport, December 6, 1962. After leaving New Delhi, members of the party will have a choice of routes, either by way of Russia or Greece. The tour will include Agra with the Taj Mahal, Bangkok, Hong Kong, the high spots of Japan, Honolulu, and Los Angeles. The tour may be extended at the traveler's choice and expense.

The all-inclusive price of $1,895.00 includes air and land transportation, basic sightseeing, twin-bedded rooms with private bath at deluxe and first-class hotels, breakfast and either lunch or dinner, except in Honolulu, basic tips, and the services of a conductor at each port. Overseas travel will be via Trans World and Japan Airlines.

The group is limited in size but there are still some vacancies. As reservations must be made in advance, those interested are urged to apply promptly to the C.I.V. International Travel Center, 7420 Waverly Street, Bethesda, Md.

Obituaries

RAY FREDERICK GUYNN, M.D.

(1893–1962)

Dr. Ray F. Guynn, Washington psychiatrist for 40 years, died, August 18, 1962, at his home, 1616 Sixteenth Street, N.W., where he also maintained his offices.

Dr. Guynn was born at Hillsville, Virginia, on September 29, 1893, to Norman and Nancy Guynn. He attended the schools of Woodlawn, Va., and received his premedical training at the University of Virginia. In 1921 he graduated from George Washington University School of Medicine. Interested in psychiatry, Dr. Guynn interned at St. Elizabeths Hospital following graduation.

Joining the Veterans Administration in 1922, he was, for several years, Chief of the Neuropsychiatric Division of its Washington Regional Office. In 1933 he was transferred to the Veterans Diagnostic Center at Mt. Alto VA Hospital, where he was in charge of the nervous and mental cases in the Outpatient Department. During this time he also lectured on neurology and psychiatry in postgraduate training courses. He left the Veterans Administration in 1937 to continue in the private practice of his specialty.

Dr. Guynn served as a private in World War I. During World War II he was a member of the Neuropsychiatric Panel of the United States Army at Fort Myer, Va. He served as Chairman of the Board of Directors of the American Legion Welfare Office from 1932 to 1940.

He was on the executive and teaching staff of Doctors Hospital. He also had courtesy privileges at most of the other District hospitals.

Elected to Active membership in the Medical Society of the District of Columbia in 1925, he transferred to Associate membership in 1929. Ten years later he was reëlected to Active membership and continued his membership until his death. He was also a member of the American Medical Association, the American Psychiatric Association, the Washington Psychiatric Society, St. Elizabeths Hospital Medical Society, and the Medical and Surgical Society of the District of Columbia. He was a member of Foundry Methodist Church.

He leaves his wife, Mrs. Bergit Steenerson Guynn, and a son, Norman Guynn, of the home address. His mother, who lives at Woodlawn, Va., also survives together with two brothers and a sister, Dyer V. Guynn, of Woodlawn; N. Zarroll Guynn, of Fisherville, Va.; and Mrs. Ila Park, of Tupper Lake, N. Y.

WATSON WILLIAM ELDRIDGE, JR., M.D.

(1887–1962)

Dr. Watson W. Eldridge, who was associated with St. Elizabeths Hospital during most of his medical career, died, July 4, 1962, at his home at 1300 S.E. Seventh Court, Deerfield Beach, Fla., where he had lived since 1956.

Dr. Eldridge was born in Washington, D. C., on July 4, 1887, to Watson W. Eldridge, Sr. and May Nash Eldridge. A graduate of old Central High School, he became one of its long role of distinguished alumni.

After receiving his medical degree from George Washington University in 1910, he practiced medicine in North Carolina and Washington, D. C. before enrolling for postgraduate study at New Rochelle Hospital in New Rochelle, N. Y., in 1913. He was Instructor in Gastroenterology at New York University and Bellevue Hospital from 1914 to 1918, and was Assistant, with the rank of Captain, in the X-ray Department of Walter Reed Hospital, from 1919 to 1920. Years later he was certified by the American Board of Radiology.

In 1920 Dr. William A. White, then Superintendent of St. Elizabeths Hospital, persuaded Dr. Eldridge to set up a general hospital in that institution. He directed this Department of Medicine and Surgery from that time until he retired in 1956. During his tenure at the Hospital he established a tuberculosis unit in 1924, thus reducing the disease rate to less than one-half of one per cent, in contrast to five per cent or more in most mental hospitals.

Dr. Eldridge also pioneered in this country in malarial injections for the treatment of patients with general paresis. This was before the development of antibiotics.

Under his direction St. Elizabeths became the first mental hospital accredited by the Joint Commission on Hospital Accreditation for internships in 1925. Since 1950 the Hospital has been accredited for resident training in surgery and neurology.

In addition to his work at St. Elizabeths, Dr. Eldridge taught medical jurisprudence at George Washington University for 30 years.

He was elected an Active member of the D. C. Medical Society in 1921 and transferred to Associate in 1935. He was a member of the American Medical Association, the George Washington University Medical Society, International Medical Society, Pan American Medical Society of D. C., and St. Elizabeths Hospital Medical Society. He had held office in Health Security Administration and was Past President of the Hospital Executives' Association. He was also a member of the Army-Navy Country Club, Masonic Lodge 198 in Kensington, Md., and the Kenna Mavin American Legion Post.

Surviving him are his wife, Mrs. Meta Fox Eldridge, of Deerfield Beach, Florida; a son, Watson W. Eldridge III, of Westfield, N. J.; and two sisters. Mrs. C. C. Hartman, of Deerfield Beach, and Mrs. Garnett Loeffler, of Washington.

WILLIAM WARRICK CARDOZO, B.A., M.D.

(1905–1962)

Dr. W. Warrick Cardozo, Washington pediatrician, died suddenly, August 11, 1962, at the Washington Hospital Center. He had practiced in Washington since 1937.

Dr. Cardozo was born in Washington, D. C., April 6, 1905. He was graduated from Ohio State University, Columbus, Ohio, receiving his B.A. degree in 1929. He continued his medical education at the same institution, graduating in 1933. Following graduation, he pursued an internship at City Hospital in Cleveland. In 1934–35 he was a resident in pediatrics at Provident Hospital in Chicago. This was followed by a two-year General Education Board fellowship in pediatrics at Children's Memorial Hospital and Provident Hospital, both in Chicago. During this period he pursued research activities in sickle cell anemia and published an important study in 1937 entitled, "Immunologic Studies in Sickle Cell Anemia."

Upon return to his native city of Washington, D. C. for private practice, he joined the staff of Howard University College of Medicine and Freedmen's Hospital in 1937 as Instructor in Pediatrics (part-time). He was subsequently promoted to Clinical Assistant Professor and later to Clinical Associate Professor of Pediatrics. He was certified by the American Board of Pediatrics in 1942, and became a Fellow of the American Academy of Pediatrics in 1948.

In recent years his specialized interest has centered upon gastrointestinal disorders in children. For the past 17 years he has been an active participant in the Gastroenterology Clinic at Freedmen's Hospital. His lectures on this subject were prepared for medical students with meticulous detail and care.

In addition to private practice, Dr. Cardozo served for 24 years as a school medical inspector in the District of Columbia Department of Health. He gave voluntary service over the years as Medical Director of the Ionia R. Whipper Home for Unwed Mothers.

He was a member of the following medical societies: the American Academy of Pediatrics, the Medical Society of the District of Columbia, the Advisory Committee of the District of Columbia

Crippled Children's Society, the National Medical Association, and the Alpha Omega Alpha honorary medical fraternity. He participated in the founding of the Gamma Chapter of Alpha Omega Alpha at Howard University College of Medicine. He was a member of the Alpha Phi Alpha fraternity. His church denomination was Episcopal. His special hobby was photography.

He is survived by his wife, Mrs. Julia M. Cardozo, and a daughter, Judy Cardozo, a student at Immaculata High School. Their home is 4891 Colorado Avenue, N.W. He is also survived by five sisters: Mrs. Margaret Holmes, Mrs. Elizabeth Barker, Mrs. Emmeta Mounsey, Mrs. Catherine R. Lewis, and Mrs. Frances Payne, all of Washington, D. C.

ROLAND B. SCOTT, M.D.

GEORGE WILLIAM REEVES, M.D.

(1910–1962)

Dr. George W. Reeves, a general practitioner in Washington over 25 years, died, August 16, 1962, at Doctors Hospital. He maintained offices at 1746 K Street, N.W.

Dr. Reeves was a native Washingtonian, born January 7, 1910, to John R. T. and Nettie Rule Reeves. He attended the public schools in Washington and graduated from Western High School. After receiving his degree in medicine from George Washington University School of Medicine in 1934, he interned at Gallinger Municipal (now D.C. General) Hospital and was resident physician at the University of Minnesota Hospital for a year. He followed this with a year's residency in obstetrics and gynecology at Columbia Hospital for Women in Washington, and continued on the staff of Columbia as Assistant in Obstetrics and Gynecology.

During World War II he served in the Army Medical Corps for four years, 1942 to 1946, and spent three years at a field hospital in China. He was separated with the rank of Captain.

Dr. Reeves had been an Active member of the Medical Society of the District of Columbia since 1938. He was a member of the American Medical Association and the Washington Medical and Surgical Society. He also belonged to the Army-Navy Country Club.

Survivors include his wife, Mrs. Elva Mae Jenkins Reeves, and three children, William J., John R. T. and Carol E., all of the home address, 2916 New Mexico Avenue, N.W. He also leaves his mother, of 1852 Columbia Road, N.W., and a brother, Richard R. Reeves, of Falls Church, Va.

FELIPE ANDRES MARTINEZ, B.A., M.D.

(1902–1962)

Dr. Felipe A. Martinez died at his home, 7827 Overhill Road, Bethesda, Md., August 4, 1962.

A native of Cuba, Dr. Martinez was born in Santiago, October 10, 1902. His father was also a physician. After coming to the United States in 1914, he graduated from Manhattan College, New York, and from Georgetown University, receiving his medical degree from the latter in 1932. He interned at St. Joseph's Hospital in Baltimore and served his residency at Providence Hospital in Washington. He continued his studies at Georgetown in anatomy and pathology, from 1933 to 1935, under Dr. Eugene R. Whitmore.

He became a naturalized citizen in 1939.

He was Attending Physician in medicine at Suburban Hospital and for a number of years was Chief of its Outpatient Department.

During World War II he was Medical Director of the Red Cross for Montgomery County and organized its First Aid unit.

Dr. Martinez was on the medical faculty of Georgetown University, having served as Professor of Anatomy since 1949. In 1955 he was awarded the Cuban Order of Merit of Carlos Finlay for his work in anatomy.

He was a member and Past President of the Pan American Medical Society of D. C., a member of the International Medical Society, the Montgomery County (Maryland) Medical Society, and the Georgetown Medical Society. He had been an Associate member of the D. C. Medical Society since 1936.

An amateur artist, he had received several medals and ribbons for his paintings exhibited in Washington and, under the sponsorship of the American Physicians' Art Association, in Chicago and Atlantic City. He was also a philatelist who specialized in medical stamps.

Surviving him are his wife, Mrs. Marguerite Kourdle Martinez, and a son, Philip J. Martinez, of the home address. He also leaves two daughters, Mrs. Andrea Mary Cooper, of Washington, and Mrs. Marguerite Cregger, of Kensington, Md.

JOSEPH MICHAEL DALY, M.D.

(1911–1962)

Dr. Joseph M. Daly, specialist in otolaryngology, died, August 19, 1962, at his home, 5640 Bent Branch Road, N.W. His offices were at 1830 K Street, N.W.

Dr. Daly was born in New York City on February 17, 1911, to Michael J. and Ellen Kearney Daly. He attended Dwight Preparatory School in New York and the University of Alabama in Birmingham. He received his medical degree from Georgetown University in 1939, and interned the following year at St. Michael's Hospital in Newark, N. J.

During World War II Dr. Daly was commissioned Major in the Medical Corps of the United States Army and served from 1940 to 1945. Upon separation from the Army he enrolled at the Graduate School of Medicine of the University of Pennsylvania for postgraduate study in otolaryngology, and spent a year as resident in otolaryngology at Mercy Hospital in Baltimore. He was on the hospital staffs of Georgetown, Children's, and the Washington Hospital Center.

Dr. Daly was an Active member of the Medical Society of the District of Columbia since 1947. He was a member of the American Medical Association, the American Academy of Ophthalmology and Otolaryngology, the American Bronchoesophageal Association, the Georgetown Clinical Society, and the George M. Kober Medical Society. He was also a Fellow of the American Academy of Ophthalmology and Otolaryngology and was certified by the American Board of Otolaryngology.

He was a member of the Congressional Country Club and the Army-Navy Town Club. He belonged to the Church of the Little Flower.

Surviving him are his wife, Mrs. Annie Mae McCoy Daly, and two sisters, Mrs. May Beam, of Buffalo, N.Y., and Mrs. Rex Bennett, of New York City.

FRANK GEORGE LESLIE, B.A., M.D.

(1896–1962)

Dr. Frank G. Leslie, an Associate member of the District of Columbia Medical Society, died, September 11, 1962 at Georgetown University Hospital. His offices were at 9001 Georgia Avenue, Silver Spring, Md.; his home at 1305 Ballard Street in Silver Spring.

Dr. Leslie was born, April 25, 1896, in Jerry City, Ohio, to Levi and Eva Evilsizer Leslie. He received his Bachelor of Arts degree from the University of Pittsburgh in 1934 and his medical degree two years later from the same institution. He interned at St. Francis Hospital in Pittsburgh. About ten years later he took postgraduate training in obstetrics and gyneclogy at Walter Reed Army Hospital.

Enlisting for military service in 1941, he served with distinction through World War II. He was separated as Colonel in 1946.

He was on the staff of Suburban Hospital in Bethesda, Md.

He was an Active member of the Montgomery County (Maryland) Medical Society and a member of the American Medical Association, the Medical and Chirurgical Faculty of the State of Maryland, and the Silver Spring Academy of Medicine. He had been an Associate member of the District of Columbia Medical Society since 1949.

He leaves his wife, Mrs. Elizabeth C. Leslie; a brother, Clem E. Leslie; and five sisters, Mrs. Lettie M. Avery, Mrs. William Schaefer, Mrs. Harry A. Daviess, Mrs. Hobart V. Browne, and Mrs. Arthur J. Porter.

MEDICAL SOCIETIES WITH LIMITED MEMBERSHIP

Washington, D. C.

1962–1963

Society	President	Secretary	No. Meetings	Date of Meetings	Place of Meeting
Academy of Medicine of Washington, D. C.	S. Bayne-Jones	C. R. Treadwell	3	Nov., Feb., June	Cosmos Club
American Academy of General Practice, D. C. Chapter	E. Aschenbach	R. M. Tilley, Jr.	6	4th Tuesday	MSDC Building
American Federation for Clinical Research, D. C. Chapter	K. Moser	H. W. Schnaper	5	On call	MSDC Building
Clinical Club of Washington	A. F. Castro	P. Dorman	7	1st Tuesday	Kennedy-Warren
Clinico-Pathological	H. V. Rizzoli	R. B. Nelson	8	3rd Tuesday	Homes
Diabetes Association of D. C.	W L. Hall	L. H Biben	4	On call	MSDC Building
Georgetown Clinical	R. J. Meyer	W. F. Colliton, Jr.	8	3rd Wednesday	Broadmoor Hotel
George Washington University Medical Alumni Association	H. E. Ticktin	F N. Miller	4	Sept., Dec., Mar., June	Alumni Office and Hospital
Hippocrates-Galen	B. G. Brown	F. T. Reuter	6	1st Thursday, Oct., Nov., Dec., Feb., Mar., Apr.	Kennedy-Warren
International Medical Club	D. Stubbs	R. V. Choisser	4–5	On call	Mayflower Hotel
Jacobi	J. Rheingold	N. Isaacson	6	3rd Monday	Mayflower Hotel
George Martin Kober	R. S. Page, Jr.	R. E. Dunkley	7	3rd Monday	Army-Navy Club
Louis Mackall	M. Ruffin	R. Taylor	8	3rd Thursday	Kennedy-Warren
Maryland-D. C. Society of Anesthesiologists	C. Hebert	H. Katzman	4	Oct., Dec., Feb., Apr.	MSDC Building and Kennedy Warren
Medical Arts Society of Greater Washington	J. B. Harrell	H. P. Laughlin	8	2nd Thursday	Kennedy-Warren
Metropolitan Health Officers' Association	T. F. McGough	D. L. Finucane	4	Sept., Dec. Mar., June	Prince Georges Country Club
Northern Virginia Academy of Ophthalmology	T. E. Haggerty	M. M. Bocknek	4	3rd Monday, Sept., Dec., Mar., June	Northern Va. Doctors Hospital
Northern Virginia Academy of Surgery	F. Williams	R. O'Donnell	3	Oct., Jan., May	
Northern Virginia Society of Internal Medicine	K. Berger	B. Snyder	5	3rd Tuesday, alternating months	Arlington and Alexandria Health Departments
Osler	F. V. Schumacher	G. C. Buchanan	8	3rd Monday	Homes
Pan American Medical Society of D. C.	J. H. Scully	C. T. Klopp	5	Oct., Nov., Dec., Feb., Apr.	
Rheumatism	R. L. Black	W. R. Felts	6–8	On call	
Saint Elizabeths	M. Woodbury	L. D. Robinson	3	Fall, winter, spring	St. Elizabeths Hospital
Saint Luke Physicians' Guild	P. Jaquet	R. H. Parrott	4	Oct., Dec., Feb., Apr.	
Thoracic Society of D. C.	M. Weiss	P. C. Adkins	4	Sept., Dec., Mar., May	Walter Reed Army Medical Center
Washington Academy of Neurosurgery	A. Morris	R. Mendelsohn	4	On call	Kenwood Country Club

Note: Most of these societies begin their meetings in October and continue through April or May.

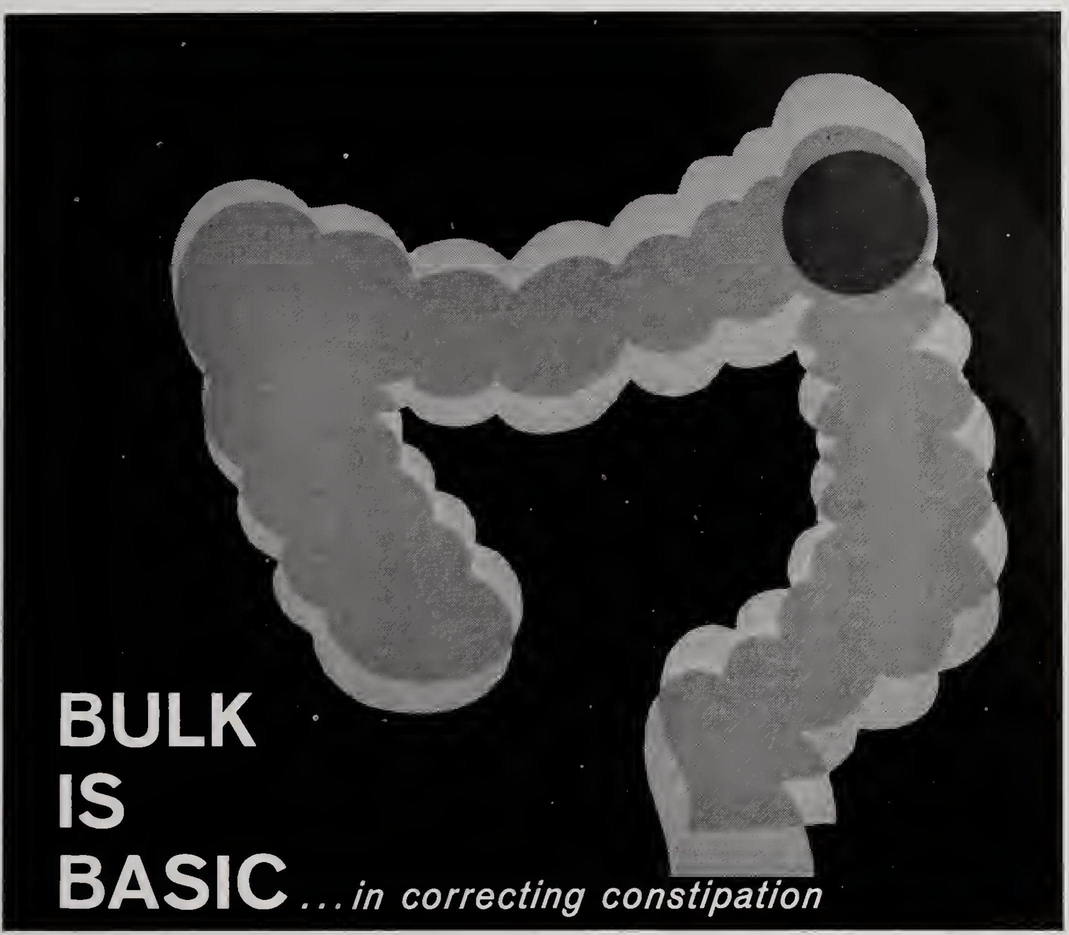
MEDICAL SOCIETIES WITH LIMITED MEMBERSHIP—Continued

Society	President	Secretary	No. Meetings	Date of Meetings	Place of Meeting
Washington Academy of Surgery	S. Schwartzbach	F. J. Sanzaro	5	Oct. 8, Dec. 10, Feb. 11, Apr. 8, May 13	Kennedy-Warren
Washington, D. C. Dermatological	M. Weiner	W. M. Willett	6	4th Thursday	
Washington Gynecological	B. W. Richwine	J. W. Pearson, Jr.	5	Oct. 17, Dec. 5, Jan. 30, Mar. 27, May	Willard Hotel
Washington Homeopathic	W. P. Baker	H. H. Custis, Jr.	4	On call	Columbia Country Club
Washington Medical and Surgical	M. C. Cobey	J. J. Wallace	7	1st Monday	Army-Navy Club
Washington Orthopedic Club	T. Foley	R. L. Dow	8	1st Monday	MSDC Building
Washington Psychiatric	S. Berman	D. W. Harris	8	4th Friday	MSDC Building
Washington Psychoanalytic Association	H. P. Laughlin	C. W. Kehne	4	Last Thursday, Sept., Jan., Apr., June	Kennedy-Warren
Washington Psychoanalytic	D. Jaffe	D. L. Burnham	9	2nd Friday	MSDC Building
Washington Society for the History of Medicine	P. D. Olch	H. Purtle	6	On call	N.I.H.
Washington Society of Pathologists	D. L. Weiss	M. A. Jackson	8	Oct. 15, Nov. 20, Dec. 21, Jan. 10, Feb. 4, Mar. 5, Apr. 3, May	Dart Auditorium, AFIP Building
Washington Urological	H. P. Dorman	G. R. Gable	6	On call	Doctors Hospital
Women's Medical	E. Andrews	H. Werner	8	1st Tuesday	

SECTIONS OF THE MEDICAL SOCIETY OF THE DISTRICT OF COLUMBIA

1962–1963

Section	Chairman	Secretary	No. Meetings	Date of Meetings	Place of Meeting
Allergy	H. E. Ratcliffe	A. M. Connor	8–12	On call	
Anesthesiology	C. L. Hebert	H. Katzman	5	Oct. 1, 14, Dec. 3, Feb. 4, Apr. 29	MSDC Building and Kennedy-Warren
Dermatology and Syphilology	M. Weiner	J. Q. Gant, Jr.		On call	
General Practice	S. Diener	C. P. Ryland	4	Oct., Jan., Feb., Apr.	MSDC Building
Internal Medicine and Allied Subspecialties	A. W. Eger	J. J. Hughes	2	On call	MSDC Building
Neurology, Neurosurgery, and Psychiatry	J. P. Gallagher	V. A. Duggins	4	On call	
Ophthalmology	H. Bastien	R. Day	4	2nd Tuesday, Oct., Dec., Feb., Apr.	Kennedy-Warren
Otolaryngology	R Ralph	E. Higgins	4	2nd Tuesday, Nov., Jan., Mar., May	Army-Navy Club
Pathology and Laboratory Medicine	G. H. Guinn	W. G. Battaile	9	Last Tuesday	MSDC Building
Physical Medicine and Rehabilitation	G. G. Reynolds	M Hendry	4	Oct., Dec., Feb., May	N.I.H.
Plastic Surgery	W C. Meloy	A. J. Suraci	6	2nd Monday, alternating months	
Radiology	A. A. J. Den	M. Thomas	4	3rd Wednesday, Oct., Jan., Mar., May	MSDC Building



METAMUCIL®

BRAND OF PSYLLIUM HYDROPHILIC MUCILLOID

STRENGTHENS THE COLONIC REFLEX

"The natural stimulus to peristalsis[1]... is the distension of the intestinal wall...."

The effectiveness of Metamucil in correcting constipation is a direct result of its physiologic action.

The stimulus which initiates the defecatory reflex is the fecal mass in the lower sigmoid colon and rectum. Metamucil provides that mass as a bland, nonirritating, easily compressed bulk, similar in consistency to the normal protective mucus of the colon.

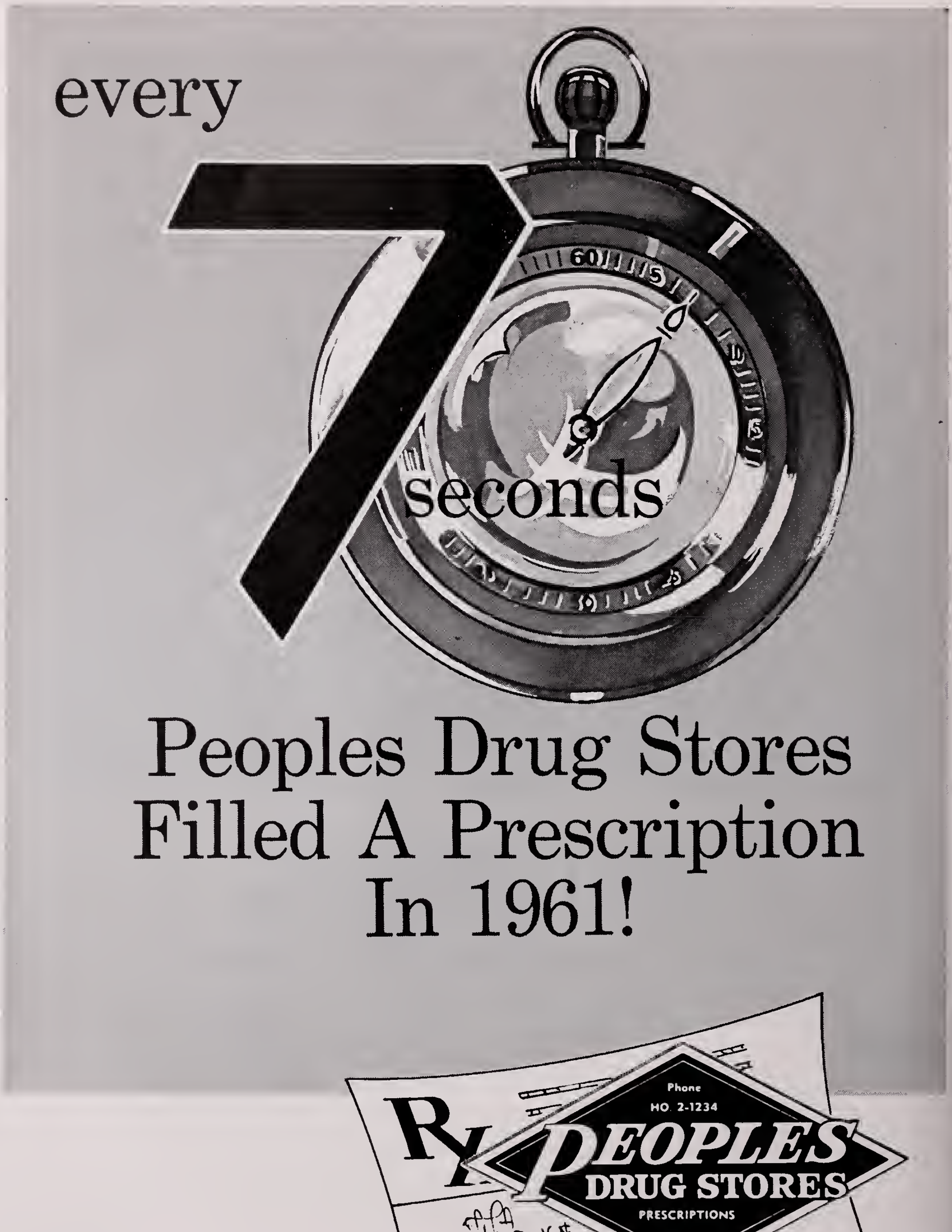
Taken regularly, Metamucil tends to correct the insensitive reflex of a bowel abused by laxatives and to restore the natural responsiveness to the urge to stool.

Metamucil is available as Metamucil powder in 4, 8 and 16-oz. containers and as lemon-flavored Instant Mix Metamucil in cartons of 16 and 30 single-dose packets.

1. Best, C. H., and Taylor, N. B.: The Physiological Basis of Medical Practice, ed. 6, Baltimore, The Williams & Wilkins Company, 1955, p. 578.

G. D. SEARLE & CO.
CHICAGO 80, ILLINOIS

Research in the Service of Medicine


every
7
seconds
60
15
30
45
Peoples Drug Stores
Filled A Prescription
In 1961!
Rx
Phone
HO. 2-1234
PEOPLES
DRUG STORES
PRESCRIPTIONS

PEOPLES DRUG STORES FILLED

4,424,474 PRESCRIPTIONS IN 1961

Long-term effectiveness of METICORTEN continues to be demonstrated in J. G., the arthritic miner whose case was first reported a year ago and who is leading a fully active life today, *after seven years of therapy.*

Schering

before METICORTEN–Rheumatoid arthritis commencing in 1949 with severe shoulder joint pain....Subsequent involvement of elbows and peripheral joints with swelling and loss of function....Complete helplessness by 1951 (fed and dressed by wife)....Unable to work despite cortisone, gold and analgesics....Hydrocortisone ineffective in 1954. **since METICORTEN**–Prompt improvement with METICORTEN, begun April 2, 1955....Returned to work that same year....Maintained to date on METICORTEN, 10-15 mg./day, without serious side effects and without losing a day's work at the mine because of arthritis....Joint pain still controlled and full use of hands and limbs maintained. The foregoing information is derived directly from a case history provided by Joel Goldman, M.D., Johnstown, Pa. Original photograph of Dr. Goldman's patient taken November 10, 1960; follow-up photographs, November 29, 1961. METICORTEN,® brand of prednisone. For complete details, consult latest Schering literature available from your Schering Representative or Medical Services Department, Schering Corporation, Bloomfield, New Jersey.

S-010

remember this arthritic miner, doctor? he's still working after another successful year (his 7th) on Meticorten®

brand of prednisone

Logical support for the atherosclerosis diet

A recent report* in the *JAMA* on atherosclerosis states, "...it appears logical to attempt to reduce high concentrations of cholesterol and other serum lipids as an experimental therapeutic procedure."

Since this report recognizes table spreads as an important source of dietary fat, it is in your professional interest to know about the fatty acid composition of the margarines from Mrs. Filbert's.

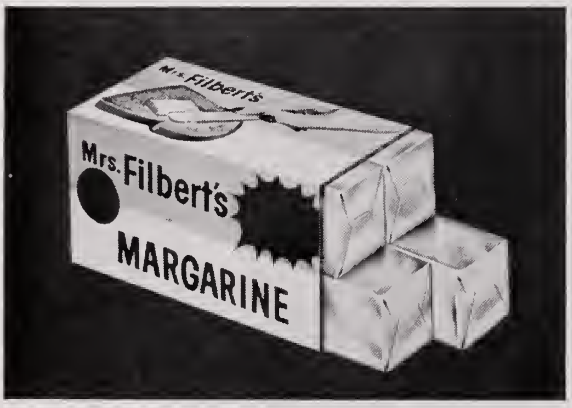
Each of Mrs. Filbert's Margarines is over 80% unsaturated and offers unique properties useful in the control of serum lipids by dietary means.

Moreover, when you recommend any one of Mrs. Filbert's Margarines, your patient is assured of unmatched taste and flavor satisfaction—an important consideration in promoting adherence to any therapeutic regimen.

*AMA Council on Foods and Nutrition: The Regulation of Dietary Fat, *JAMA* 181: 411-423 (August 4, 1962).

Mrs. Filbert's
100% CORN OIL
CORN OIL MARGARINE

Mrs. Filbert's Corn Oil Margarine is made from 100% corn oil, over 50% of which retains its *liquid* characteristics. Because of its high linoleic content, its ratio of polyunsaturates to saturates exceeds 1.5 to 1 . . . and equals the highest level available today in *any* corn oil margarine. Thus, it can be most useful in a program for reducing serum cholesterol levels.



Mrs. Filbert's Margarine is a popular, conventional-type margarine with no premium price. It is made from the finest domestic vegetable oils, which are partially hydrogenated for texture, but remain over 80% unsaturated. It has a ratio of polyunsaturates to saturates in excess of 1 to 1.

2 EXTRA STICKS
Mrs. Filbert's
whipped margarine

Mrs. Filbert's Whipped Margarine contains the same number of calories per pound as ordinary margarine, but contains 30% *fewer calories per pat* because it is whipped. When spread normally, it provides satisfaction with a reduction in fat calories. And its ratio of polyunsaturates to saturates exceeds 1 to 1.

If you would like information about Mrs. Filbert's family of margarines—including detailed listings of their component characteristics—please write us.

J. H. FILBERT, Inc.
Baltimore 29, Maryland

BOOKS RECEIVED

Acknowledgment is made of the following books which have recently been received.

Gynecology and Obstetrics. John William Huffman, M.D. Price, $28.00. Pp. 1190, with 536 illustrations. Philadelphia: Saunders, 1962.

Synopsis of Obstetrics, 6th ed. Charles E. McLennan, M.D. Price, $6.75. Pp. 464, with 157 illustrations, including 4 color. St. Louis: Mosby, 1962.

Ciba Foundation Symposium, jointly with Coördinating Committee for Symposia on Drug Action on Enzymes and Drug Action. J. L. Mongar, Ph.D., Editor for the Coördinating Committee, and A. V. S. deReuck, M.Sc., D.I.C., Editor for the Ciba Foundation. Price, $12.50. Pp. 556, with 90 illustrations. Boston: Little, 1962.

Fundamental Skills in Surgery. Thomas F. Nealon, Jr., M.D. Price, $8.50. Pp. 289. Illustrated by Ellen Cole. Philadelphia: Saunders, 1962.

The Ciba Collection of Medical Illustrations, Volume 3. A Compilation of Paintings on the Normal and Pathologic Anatomy of the Digestive System: Part II, Lower Digestive Tract. Prepared by Frank Netter, M.D. Edited by Ernst Oppenheimer, M.D. Price, $15.00. Pp. 243, with 200 illustrations. Summit, N. J.: Ciba, 1962.

Treatment of Injuries to Athletes. Don H. O'Donoghue, M.D. Price, $18.50. Pp. 649, with 457 illustrations. Philadelphia: Saunders, 1962.

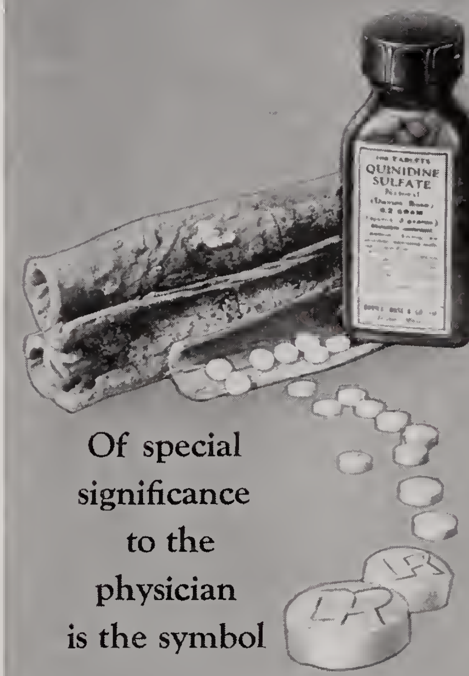
Gynecology. Langdon Parsons, M.D., and Sheldon C. Sommers, M.D. Price, $20.00. Pp. 1250, illustrated. Philadelphia: Saunders, 1962.

Textbook of Pathology with Clinical Application. 2nd ed. Stanley L. Robbins, M.D. Price, $19.00. Pp 1190, illustrated. Philadelphia: Saunders, 1962.

Ionizing Radiation; an Old Hazard in a New Era. George Tievsky, M.D. Price, $8.00. Pp. 154, with 63 illustrations. Springfield, Ill.: Thomas, 1962.

Clinical Pathology: Application and Interpretation, 3rd. ed. Benjamin B. Wells, M.D., Ph.D. Price, $9.00. Pp. 541, with 24 illustrations. Philadelphia: Saunders, 1962.

Ciba Foundation Symposium on Tumour Viruses of Murine Origin. G. E. W. Wolstenholme, O.B.E., M.A., M.B., M.R.C.P., and Maeve O'Connor, B.A. Price, $10.75. Pp. 441, with 72 illustrations. Boston: Little, 1962



Of special significance to the physician is the symbol

When he sees it engraved on a Tablet of Quinidine Sulfate he has the assurance that the Quinidine Sulfate is produced from Cinchona Bark, is alkaloidally standardized, and therefore of unvarying activity and quality.

When the physician writes "DR" (Davies, Rose) on his prescriptions for Tablets Quinidine Sulfate, he is assured that this "quality" tablet is dispensed to his patient.

Rx Tablets Quinidine Sulfate Natural
0.2 Gram (or 3 grains)
Davies, Rose

Clinical samples sent to physicians on request

Davies, Rose & Company, Limited
Boston 18, Mass.

0-7

Listen . . . good news!

GET BROADER PROTECTION AGAINST CLAIMS RESULTING FROM PRACTICE OF MEDICINE

with St. Paul's Professional Liability Insurance

1. **Broader Protection.** A *St. Paul* policy assures you of complete "professional services" protection.

2. **Absence of Exclusions.** All professional liability policies are not the same. The *St. Paul* policy has only one exclusion—Workman's Compensation as it applies to your own employees.

3. **Experienced, Sound Company.** The *St. Paul* has established an enviable record of competence extending over more than 100 years.

4. **Effective Defense and Prevention.** Close liaison with doctors and medical societies helps the Company to pinpoint areas of risk and to develop educational material which assists doctors in avoiding claims.

For complete information on "broader protection" Professional Liability Insurance see your nearest *St. Paul* agent.

THE ST. PAUL
INSURANCE COMPANIES

Serving you around the world... around the clock

St. Paul Fire & Marine Insurance Company
St. Paul Mercury Insurance Company
Western Life Insurance Company

Approved Carrier of The Medical Society of the District of Columbia

The following Agents are ready to serve you and are as close as your telephone:

M. Abrams & Co., 514 Washington Bldg.
Washington 5, D.C. NAtional 8-6578

Anderson & Company, Inc., 1832 M St., N.W.,
Washington 6, D.C. EM 3-9393

A. H. Baker & Company, 930 Woodward Bldg.,
Washington 5, D.C. EXecutive 3-2460

District Agency Company, 800 Investment Bldg.
1511 K Street, N.W., Washington 5, D.C.
NAtional 8-8756

Eig & McKeever, Agents, 8641 Colesville Road,
Silver Spring, Maryland
Telephone JUniper 8-8200

Feldmann Insurance Agency, 267 Carroll St., N.W.,
Washington 12, D.C. TUckerman 2-4079

Greater Washington Agency, Inc., 419 Union
Trust Building, Washington 5, D.C.
STerling 3-8383

Harrell Brothers & Campbell, Suite 101,
1757 K St., N.W., Washington 6, D.C.
STerling 3-3555

Insurance Services Co., Inc.
3408 Wisconsin Ave., N.W.
Washington 16, D.C.
WOodley 6-8180

Lampson & Ashley Ins. Agency
7044 Carroll Ave., Takoma Park, Md.
JUniper 5-7166

LeRoy Mark, Inc., 408 Colorado Bldg.,
Washington 5, D.C. NAtional 8-0601

Martens & Moore, 4801 Wisconsin Ave., N.W.,
Washington 16, D.C. EMerson 3-5300

McDermott Insurance, 1130 17th St., N.W.,
Washington 6, D.C. DIstrict 7-1114

Harry Merkin Company, 815 15th Street, N.W.,
Washington 5, D.C. STerling 3-4977

H. Gabriel Murphy & Co., Inc.,
1001 Connecticut Ave., N.W., Washington 6, D.C.
DIstrict 7-9300

Howard W. Phillips & Co., 1820 N St., N.W.,
Washington 6, D.C. FEderal 8-2121

Russell, Marsh & Kennedy, Inc., Marsh Building,
1832 M St., N.W., Washington 6, D.C.
FEderal 8-7600

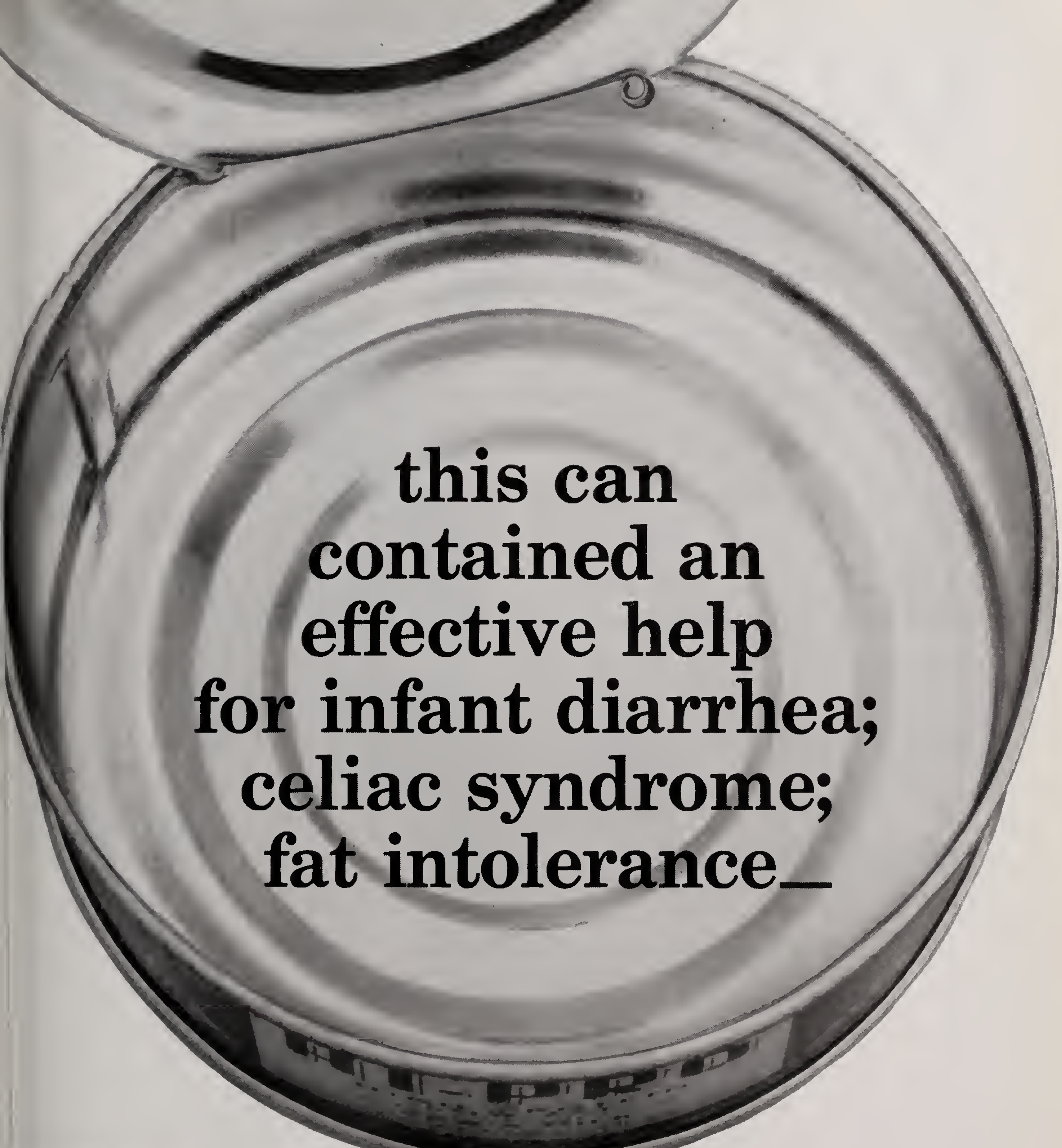
Victor O. Schinnerer & Co., Inc.
1131 Investment Bldg., Washington 5, D.C.
REpublic 7-1929

Walker & Dunlop Agency, Inc.
905 16th Street, N.W.
Washington 6, D.C.
STerling 3-5050

Watson & Watson, Sheraton Bldg.,
711 14th St., N.W., Washington 5, D.C.
DIstrict 7-7166

Young & Simon, Inc., Suite 340, Woodward Bldg.,
Washington 5, D.C.
DIstrict 7-5180

WASHINGTON, D.C. OFFICE
910 17th St., N.W. Washington 6, D.C.
COMPLETE CLAIMS SERVICE—Tel. 296-4474



this can
contained an
effective help
for infant diarrhea;
celiac syndrome;
fat intolerance—

HI-PRO
HIGH PROTEIN
LOW FAT
COW'S MILK
SON MITCHELL PHARMACEUTICALS INC
CULVER CITY CALIF

Pro contains Protein 41%; 14%; Lactose 35%. Avail- e in 1-lb. and 2½-lb. cans.

AND IT'S FREE

SEND ME MY FREE SAMPLE OF HI-PRO, 2 OZ. SIZE

Mail to: Jackson-Mitchell Pharmaceuticals, Inc.
10401 Virginia Ave., Culver City, California
Babying Americans since 1934

Name ____________________

Address ____________________

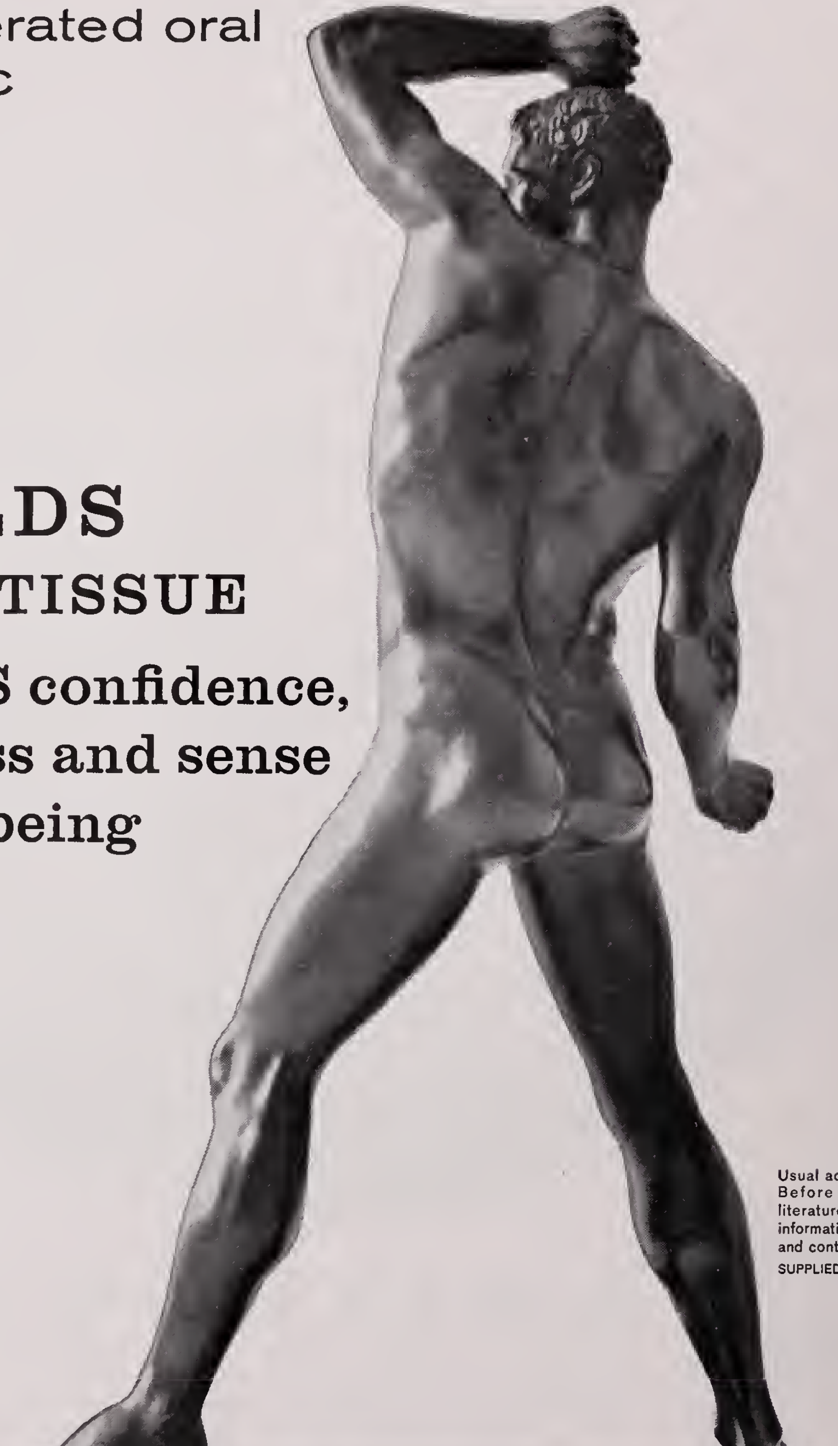
City ____________ Zone ______ State ____________

THE SIGNIFICANT NEW PHYSIOTONIC

WINSTROL®

BRAND OF STANOZOL

well tolerated oral anabolic



BUILDS BODY TISSUE

BUILDS confidence, alertness and sense of well-being

Usual adult dose: 1 tablet t.i.d
Before prescribing, consul
literature for additional dosage
information, possible side effects
and contraindications.

SUPPLIED: 2 mg. tablets. Bottles of 100.

Winthrop
LABORATORIES
New York 18, N. Y.

With WINSTROL, patients look better...feel stronger—because they are stronger

THE
BIRTCHER MEDICAL DISTRIBUTORS
OF D. C.

Complete lines of
Physical and Hydrotherapy Equipment
Electro-Surgical Equipment
Electrocardiograph–Cardioscope–
Defibrillator and Heart Pacer

Distributors for:

PROFEXRAY X-RAY EQUIPMENT

A complete line of Radiographic and Fluoroscopic Equipment from the small Portable to 900 ma–150 KVP and superficial therapy. Also, most makes of X-ray accessories.

New and used equipment always in stock.

3314 M Street, N.W., Washington 7, D. C.
FEderal 3-2660

T. J. STRATTON

MEDICAL EQUIPMENT REPAIR SERVICE

Official factory service station for
many manufactures.

Mail this coupon today for the
complete printed program of the
Eighth Hahnemann Symposium

MEDICAL CONSIDERATIONS
in the
SURGICAL PATIENT
December 12-14 inc.
Sheraton Hotel, Philadelphia

Wilbur Oaks, M. D.,
Symposium Director
Hahnemann Medical College & Hospital
230 North Broad street, Philadelphia

Name____________________M. D.

Address____________________

City______________Zone______

State____________________

When treatment for

IMPOTENCE

is indicated

ANDROIDT.M. tablets

ANDROGEN-THYROID-COMBINATION

in two convenient dosage forms

ANDROID

Each yellow tablet contains:

Methyl Testosterone	2.5 mg.
Thyroid Ext. (1/6 gr.)	10 mg.
Glutamic Acid	50 mg.
Thiamine HCl	10 mg.

ANDROID-H.P.
(High Potency)

Each orange tablet contains:

Methyl Testosterone	5 mg.
Thyroid Ext. (1/2 gr.)	30 mg.
Glutamic Acid	50 mg.
Thiamine HCl	10 mg.

INDICATIONS: Impotence in male.

AVERAGE DOSE: One tablet three times daily.

AVAILABLE: Bottles of 100 and 500 at your pharmacy.

CAUTION: Not to be used when testosterone is contra-indicated.
Federal law prohibits dispensing without prescription.

1. *Methyltestosterone-Thyroid in Treating Impotence*, A. S. Titeff, *General Practice, Vol. 25, No. 2, February, 1962, pp. 6-8.*
2. *Thyroid-Androgen Relations*, L. Hellman, et al., *The Jrl. of Clin. Endocrinology and Metabolism, August 1959.*

Write for samples and literature...

BROWN **THE BROWN PHARMACEUTICAL COMPANY**
2500 West Sixth Street, Los Angeles 57, California

from boutonneuse fever in Africa

Whether treating boutonneuse fever, bronchopneumonia, or a host of other infections, physicians throughout the world continue to rely on the effectiveness, relative safety, and exceptional toleration of Terramycin in broad-spectrum antibiotic therapy. This continuing confidence is based upon thousands of published clinical reports and successful experience in millions of patients. *The next infection you see will more than likely be "Terra-responsive."*

ience for the world's well-being® Pfizer PFIZER LABORATORIES Division, Chas. Pfizer & Co., Inc. New York 17, New York

IN BRIEF The dependability of Terramycin in daily practice is based upon its broad range of antimicrobial effectiveness, excellent toleration, and low toxicity. As with other broad-spectrum antibiotics, overgrowth of nonsusceptible organisms may develop. If this occurs, discontinue the medication and institute appropriate specific therapy as indicated by susceptibility testing. Glossitis and allergic reactions to Terramycin are rare. For complete information on Terramycin dosage, administration, and precautions, consult package insert before using.

More detailed professional information available on request.

Boutonneuse fever is a tick-borne, acute, febrile disease often affecting children. The bite site becomes a small, necrotic ulcer. A striking macular or maculopapular eruption develops on the trunk, palms and soles. Onset is sudden, with chills, high fever, violent headache and lassitude. The high temperature—up to 103° F.—characteristic of both boutonneuse fever and bronchopneumonia, drops rapidly following initiation of Terramycin therapy.

o bronchopneumonia in D. C.

BRAND OF OXYTETRACYCLINE

Terramycin® capsules · syrup · pediatric drops
intramuscular solution · intravenous

also available with nystatin as TERRASTATIN® (capsules and oral suspension)

INSURANCE FOR THE DOCTOR

Russell, Marsh & Kennedy, Inc.
(*formerly Hufty, Eubank & Russell, Inc.*)

WILLIAM G. RUSSELL
President

1832 M Street, N.W.
Tel. FEderal 8-7600

PROFESSIONAL LIABILITY*
OFFICE PUBLIC LIABILITY
LOW COST TERM LIFE INSURANCE

Also:

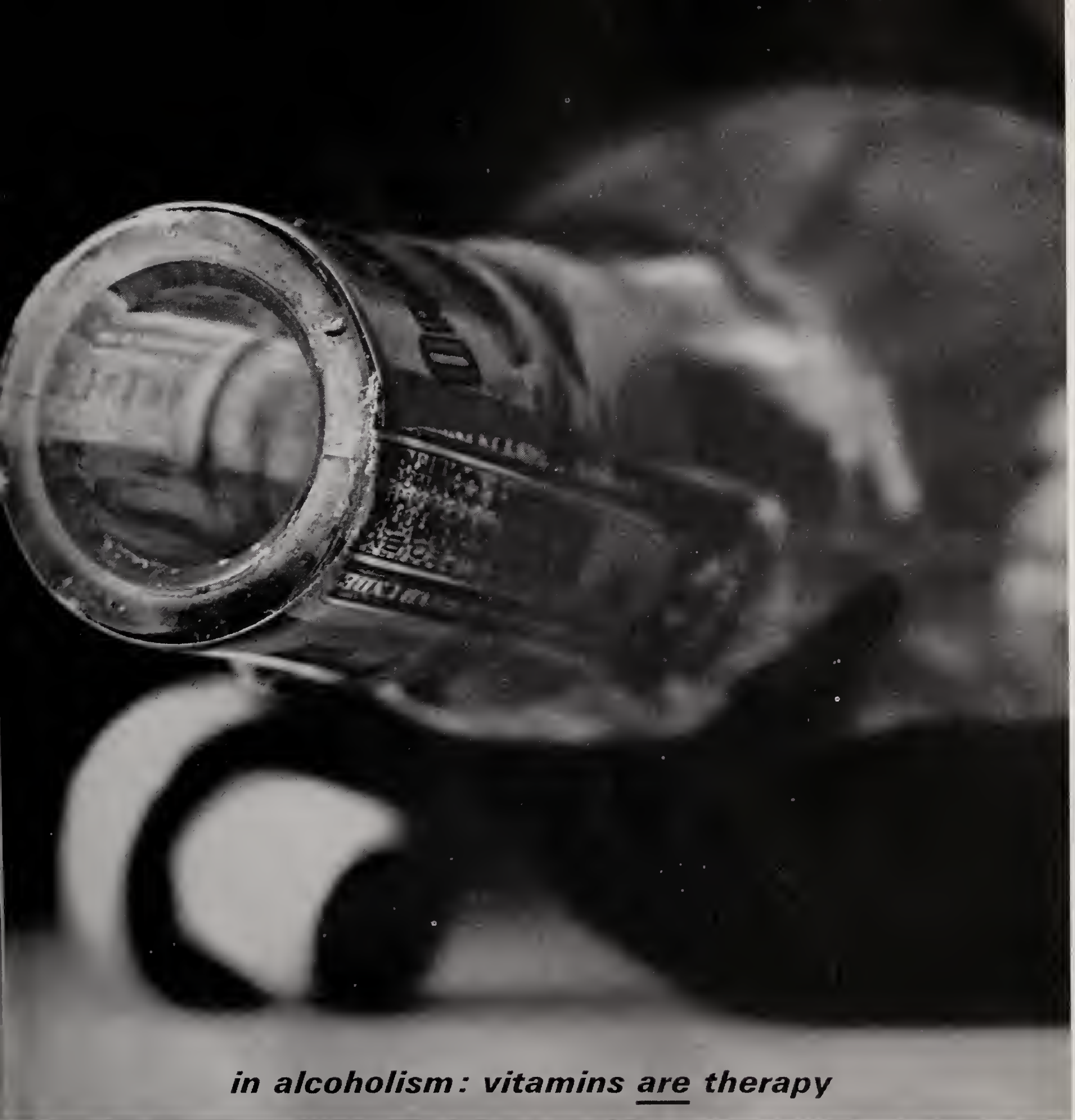
EMPLOYEES WORKMEN'S COMPENSATION
EQUIPMENT FLOATER
FIRE INSURANCE CONTENTS
BUSINESS EXPENSE DISABILITY
BONDS ON EMPLOYEES

AUTOMOBILE INSURANCE
ANNUITIES—FIXED & VARIABLE
NON-CAN DISABILITY INCOME
PENSION PLANS FOR DOCTORS
PENSION PLANS FOR EMPLOYEES

*Endorsed by The Medical Society of the District of Columbia

Coca-Cola, too, is compatible with a well balanced diet. As a pure, wholesome drink, it provides a bit of quick energy ... brings you back refreshed after work or play. It contributes to good health by providing a pleasurable moment's pause from the pace of a busy day.

DRINK
Coca-Cola
TRADE-MARK ®



A full "comeback" for the alcoholic is partly dependent on nutritional balance...aided by therapeutic allowances of B and C vitamins. Typically, the alcoholic patient is seriously undernourished...from long-standing dietary inadequacy, from depletion of basic reserves of water-soluble vitamins. Supplied in decorative "reminder" jars of 30 and 100.

Each capsule contains:	
Vitamin B_1 (Thiamine Mononitrate)	10 mg.
Vitamin B_2 (Riboflavin)	10 mg.
Niacinamide	100 mg.
Vitamin C (Ascorbic Acid)	300 mg.
Vitamin B_6 (Pyridoxine HCl)	2 mg.
Vitamin B_{12} Crystalline	4 mcgm.
Calcium Pantothenate	20 mg.

Recommended intake: Adults, 1 capsule daily, or as directed by physician, for the treatment of vitamin deficiencies.

LEDERLE LABORATORIES, A Division of AMERICAN CYANAMID COMPANY, Pearl River, N. Y. Lederle

STRESSCAPS®

Stress Formula Vitamins Lederle

Put your low-back patient back on the payroll

Soma relieves stiffness –stops pain, too

YOUR CONCERN: Rapid relief from pain for your patient. Get him back to his normal activity, fast!

HOW SOMA HELPS: Soma provides direct pain relief while it relaxes muscle spasm.

YOUR RESULTS: With pain relieved, stiffness gone, your patient is soon restored to full activity—often in days instead of weeks.

> Kestler reports in controlled study: *Average time for restoring patients to full activity: with Soma, 11.5 days; without Soma, 41 days.* (*J.A.M.A. Vol. 172, No. 18, April 30, 1960.*)

Soma is notably safe. Side effects are rare. Drowsiness may occur, but usually only in higher dosages. Soma is available in 350 mg. tablets. USUAL DOSAGE: 1 TABLET Q.I.D.

The muscle relaxant with an independent pain-relieving action

SOMA®

(carisoprodol, Wallace

Wallace Laboratories, Cranbury, New Jerse

EMOTOGENIC
OR FUNCTIONAL?

Whatever the cause... belbarb® soothes the agitated mind and calms G-I spasms through the central effect of phenobarbital and the synergistic action of fixed proportions of natural belladonna alkaloids on the G-I tract.

Sedative—Antispasmodic
20 years of clinical satisfaction

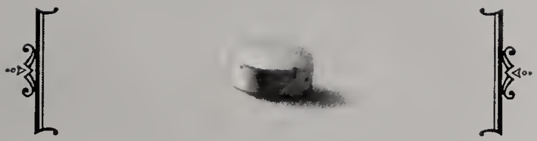
belbarb®

COMPOSITION: Each Belbarb tablet or fluidram Elixir contains phenobarbital ¼ gr., belladonna alkaloids equiv fresh tr. belladonna 8 min. Belbarb No. 2 same as Belbarb except ½ gr. phenobarbital for more sedative action.

HOW SUPPLIED: Tablets Bottle of 100, 500 and 1000. Elixir Pint and gallon bottles.

CHARLES C. HASKELL & COMPANY
Richmond, Virginia

Whatever happened to handkerchiefs?

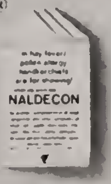


Remember when handkerchiefs were used for stuffy or runny noses? *That was before Naldecon.* Naldecon lets your head-cold patient breathe the way he should. Through the nose. Honest relief that lasts up to 8 hours with one sustained-action tablet. (When you need it, even *half* a tablet retains the sustained-action feature.) The counterbalance between *two* antihistamines and *two* decongestants* usually gives excellent results—seldom causes overstimulation or sedation. Keep handkerchiefs for showing. Prescribe Naldecon.

*Each tablet contains phenylephrine HCl 10 mg., phenylpropanolamine HCl 40 mg., phenyltoloxamine citrate 15 mg., chlorpheniramine maleate 5 mg.—half in the outer layer, half in the sustained-action core. Each teaspoonful (5 cc.) of Naldecon Syrup contains the equivalent of one-half tablet.

NALDECON®
long-acting nasal decongestant/antihistamine

BRISTOL LABORATORIES
Div. of Bristol-Myers Co.
Syracuse, New York



a pair of cardiac patients:

Patients portrayed by professional models.

both are free of pain—but only one is on

DILAUDID®
(Dihydromorphinone HCl)

swift, sure analgesia normally unmarred by nausea and vomiting

DILAUDID provides unexcelled analgesia in acute cardiovascular conditions. Onset of relief from pain is almost immediate. The high therapeutic ratio of DILAUDID is commonly reflected by lack of nausea and vomiting—and marked freedom from other side-effects such as dizziness and somnolence.

● **by mouth** ● **by needle** ● **by rectum**
2 mg., 3 mg., and 4 mg.

May be habit forming—usual precautions should be observed as with other opiate analgesics.

KNOLL PHARMACEUTICAL COMPANY · ORANGE, NEW JERSEY

THE MEDICAL ANNALS OF THE DISTRICT OF COLUMBIA is published by the Medical Society of the District of Columbia for the promulgation of information of scientific, general medical and personal interest.

Manuscripts for publication, news items, books for review, and correspondence relating to the editorial management should be sent to DR. WALLACE M. YATER, editor, MEDICAL ANNALS OF THE DISTRICT OF COLUMBIA, 1718 M Street, N.W., Washington 6, D. C.

Articles are accepted for publication on condition that they are contributed solely to this journal. Manuscripts must be typewritten, double spaced, and the original copy submitted. Photographs and drawings for illustrations must be carefully marked and show clearly what is intended. MEDICAL ANNALS will bear the cost of printing two cuts accompanying manuscripts submitted for publication. The cost of printing more than 2 cuts must be borne by the author.

Bibliographies should include the name of author (last name and initials), exact title of article, name of periodical, with volume, page, month (day of month in weekly), and year. References should be numbered consecutively in the order in which they appear in the text.

Matter appearing in the ANNALS is covered by copyright but, as a rule, no objection will be made to its reproduction in reputable medical journals, if proper credit is given. However, the reproduction for commercial purposes of articles appearing in the MEDICAL ANNALS OF THE DISTRICT OF COLUMBIA will not be permitted.

Reprints may be obtained at cost.

THE MEDICAL ANNALS OF THE DISTRICT OF COLUMBIA is published monthly. Subscription is included in the annual dues of members. To non-members the annual subscription price is: Domestic $4.50; Canadian, $5.00; foreign $5.50, including postage; single copies, fifty cents.

Checks, etc. should be made payable to the Medical Society of the District of Columbia.

MAXWELL
AND
TENNYSON
PHARMACISTS

"Where Pharmacy is a Profession"

M+T

Washington, D. C.

1801 Eye Street **NAtional 8-0206**
1835 Eye Street **REpublic 7-4600**
1726 Eye Street **STerling 3-7077**

Prescription called for and delivered
without extra charge

Exclusive Distributor
Marcelle Cosmetics*
HYPO-ALLERGENIC
Chicago, Illinois

*Accepted for advertising in publications of the American Medical Association.

In the Chevy Chase Area
FOR THE BEST IN DRUGS AND SERVICE
IT'S
HIGGER'S
Complete Biological Stocks
Marcelle Hypo Allergenic Toiletries

HIGGER'S DRUGS, INC.
5015-17 Connecticut Avenue
Phone: Woodley 6-1815

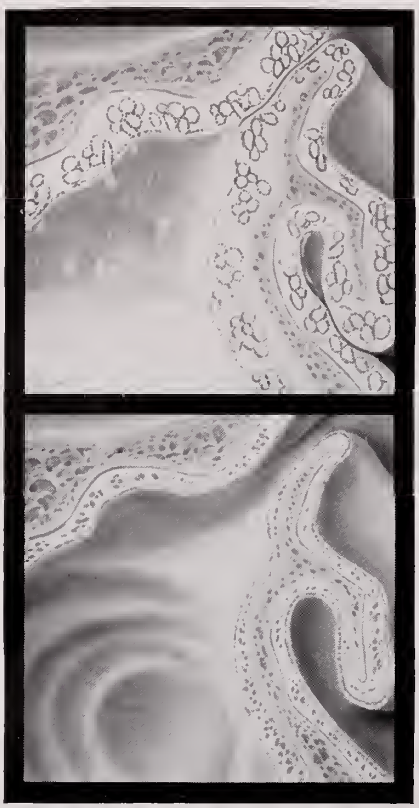
THE BLOOD SERVICE PLAN
of the
Metropolitan Washington Blood Banks, Inc.
(Not for Profit)

THE BLOOD SERVICE PLAN operates to supply or replace all the blood and plasma needed by a member who requires transfusions. Each member is guaranteed protection for **unlimited** blood replacement anywhere in the United States for the duration of the membership period.

For information telephone 347-2220

Suite 500-915 Nineteenth Street, N.W.
T. A. LOOSBROCK, Executive Director

In colds and sinusitis unsurpassed in providing drainage space without chemical harm



The clogged sinus
In sinusitis, the mucous membrane becomes hyperemic and edematous, lymph glands and goblet cells hyperactive. Ostium is closed by edema and secretions cannot drain freely.

The normal sinus
Magnified anatomy of a portion of maxillary sinus showing mucous membrane with cilia and lymph glands. Ostium is normal and patent.

NEO-SYNEPHRINE®
brand of phenylephrine hydrochloride
hydrochloride

NASAL SPRAYS AND SOLUTIONS

When there is nasal turgescence, tiny orifices of sinus ostia tend to clog. Neo-Synephrine nasal solutions and sprays reduce edematous tissues on contact to provide prompt relief. As turbinates shrink, obstructed sinus ostia open, drainage and breathing become freer and the boggy feeling of a cold disappears.

Delicate respiratory tissue and its natural defenses are not harmed by exceptionally bland Neo-Synephrine; systemic effects are nil; it does not sting. For years it has been recommended for prevention and treatment of sinusitis.[1-3] Repeated applications do not lessen effectiveness.

Available in plastic nasal sprays for adults (½%) and children (¼%), in dropper bottles of ⅛, ¼ or 1 per cent.

1. Grant, L. E.: Coryza and nasal sinus infections, **Clin. Med. & Surg.** 42:121, March, 1935. 2. Putney, F. J.: Sinus infection, in Conn, H. F. (Ed.): Current Therapy 1952, Philadelphia, W. B. Saunders Company, 1952, p. 110. 3. Simonton, K. M.: Current treatment of sinusitis, **Journal-Lancet** 79:535, Dec., 1959.

Winthrop LABORATORIES
New York 18, N.Y.

When you choose an anorectic—

"Does it help the patient
maintain the proper diet,
is it free of dangerous
side effects, and does
the patient like it?"[1]

Perhaps you'll find, as
Stevenson did, "['Eskatrol']
seems to meet these
criteria better than most."

1. Stevenson, L.E.: M. Ann. District of Columbia *30*:409 (July) 1961.

ESKATROL®
SPANSULE®
brand of sustained release capsules

PRESCRIBING INFORMATION

Formula: Each 'Eskatrol' *Spansule* sustained release capsule contains Dexedrine® (brand of dextro amphetamine sulfate), 15 mg., and Compazine® (brand of prochlorperazine), 7.5 mg., as the dimaleate.

Recommended Dosage: One 'Eskatrol' *Spansule* capsule daily, taken in the morning.

Side Effects: Side effects (chiefly nervousness and insomnia) are infrequent, and usually mild and transitory.

Cautions: Clinical experience has demonstrated that 'Eskatrol' (containing the phenothiazine derivative, prochlorperazine) has a wide margin of safety and that there is little likelihood of blood or liver toxicity or neuromuscular reactions (extrapyramidal symptoms). The physician should be aware, however, of their possible occurrence.

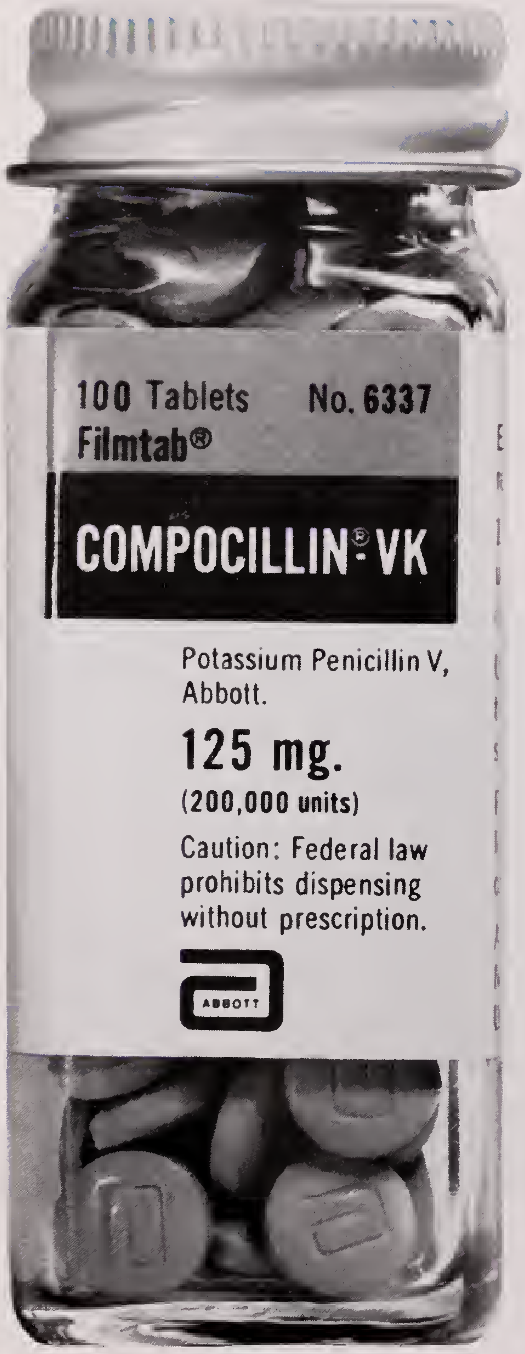
'Eskatrol' *Spansule* capsules should be used with caution in the presence of severe hypertension, advanced cardiovascular disease, or extreme excitability.

Prescribing information adopted Jan. 1961

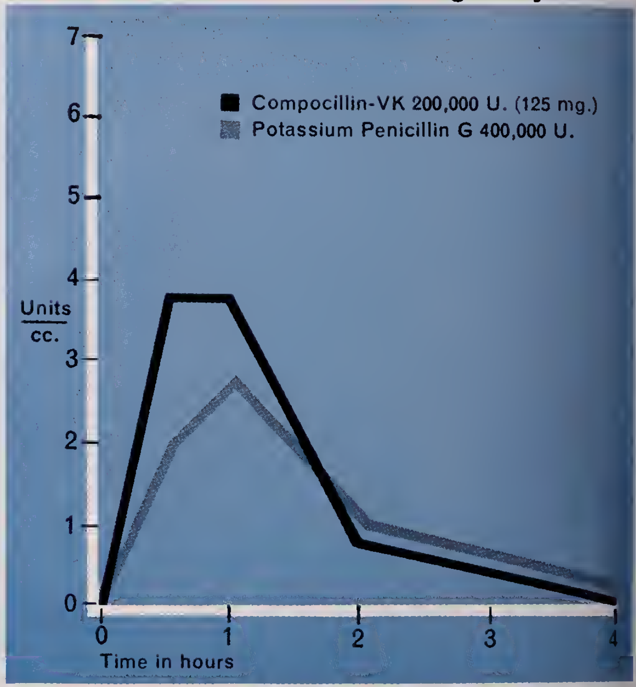
Smith Kline & French Laboratories

Here's a penicillin that gives you...

PATIENT ECONOMY WHEN YOU WANT IT


100 Tablets
No. 6337
Filmtab®
COMPOCILLIN®-VK
Potassium Penicillin V, Abbott.
125 mg.
(200,000 units)
Caution: Federal law prohibits dispensing without prescription.
ABBOTT

Single Oral Doses to Fasting Subjects*

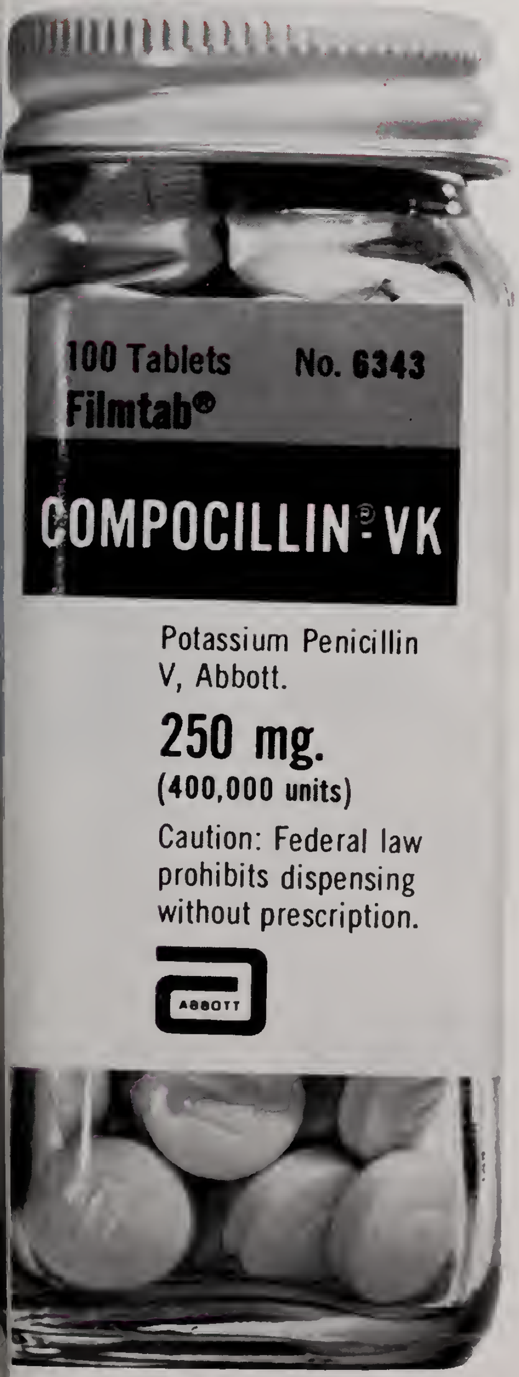


Consider milder bacterial infections

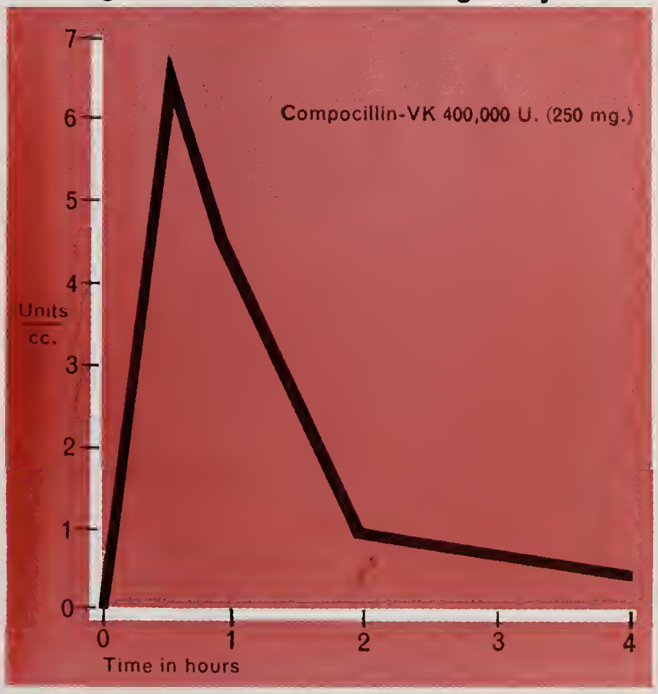
An example might be a respiratory infection. Here economy could be a definite factor in your thinking. In the chart above, you'll see that 200,000 units (125 mg.) of Compocillin VK produces blood levels at least equal to those obtained with 400,000 units of oral penicillin G potassium. This means that in less severe infections, Compocillin-VK may be given at *half* the dosage needed with oral penicillin G—with no sacrifice in blood levels. In these cases, the cost of Compocillin-VK therapy will be no more—and often will be less—than treatment with oral penicillin G.

Compocillin-VK—the original potassium penicillin V • In Filmtab (125 and 250 mg.) and cherry-flavored Granules for Oral Suspension
Filmtab—Film-sealed tablets, Abbott; U.S. Pat. No. 2,881,085

PEAK EFFICIENCY WHEN YOU NEED IT


100 Tablets
No. 6343
Filmtab®
COMPOCILLIN®-VK
Potassium Penicillin V, Abbott.
250 mg.
(400,000 units)
Caution: Federal law prohibits dispensing without prescription.
ABBOTT

Single Oral Doses to Fasting Subjects*



Then, for severe infections...

. . . where your primary concern is high peak serum concentrations, you can prescribe Compocillin-VK at *full therapeutic dosage* and get the maximum antibacterial activity possible with an oral penicillin. The chart above shows the rapid peak blood levels obtained with 400,000 units (250 mg.) of Compocillin-VK. Actually, these peaks occur faster—and are higher—than those obtained with intramuscular penicillin G. Indeed, Compocillin-VK has been used in cases previously reserved for parenteral treatment. The safety advantage (oral vs. injectable) goes without saying.

*Chart data from two separate studies completed by the Microbiologic and Medical Departments of Abbott Laboratories.

ABBOTT LABORATORIES NORTH CHICAGO, ILLINOIS

710274

KALORAMA
CONVALESCENT
HOME, INC.

Licensed by the D. C. Department
of Licenses and Inspections

INSTITUTIONAL CARE
for the medical management of
the acute stages of alcoholism.

2001 KALORAMA ROAD
at 20th Street, N.W. Decatur 2-2681

"We Make Business Possible"

MALLOREY
OFFICE SUPPLY
COMPANY

Commerical Stationers
Printing
Office Supplies ● Engraving Office Furniture

732 9th Street, N.W.
Washington 1, D. C.
Republic 7-0414

BEUCHLER'S
915-19th Street, N.W. Republic 7-6006

After October 1
New Showrooms and Warehouse
7815 Woodmont Avenue
Bethesda, Maryland
New Telephone Number
656–2000

BETH-MONT SURGICAL SUPPLY CO.

PHYSICIAN SUPPLIES
ANATOMICAL SUPPORTS
HOSPITAL EQUIPMENT

Instruments
Blood Chemistry Reagents
Disposable Products
Anatomical Supports—Stockings
Wheel Chairs—Hospital Beds
Office Equipment—Colostomy Supplies

Call ASSCO for Fast Delivery

ACCREDITED
SURGICAL SALES
3226 Wisconsin Ave., N.W. **EM 3-9595**
Washington, D. C.

THE LAUREL SANITARIUM LAUREL, MARYLAND

Geriatric
Hospital
Buildings in centre
of 122 acres.
ESTABLISHED 1905

Accommodations
available for
senile ambulatory
women who need
psychiatric care.

LICENSED FOR TREATMENT OF NERVOUS AND MENTAL DISEASES
Phone Parkway 5-1250—Jesse C. Coggins, M.D.—Medical Director

NATIONAL AND REGIONAL MEETINGS

October 15–17: Second Interstate Scientific Assembly. Sheraton-Park Hotel, Washington. Address: Mr. Theodore Wiprud, 1718 M Street, N.W., Washington 6, D. C.

October 15–19: 48th Annual Clinical Congress, American College of Surgeons. Atlantic City, N. J. Address: Dr. William E. Adams, *Secretary*, 40 East Erie Street, Chicago 11, Ill.

October 21–26: American Society of Anesthesiologists, Inc. Statler-Hilton Hotel, New York City. Address: Mr. John W. Andes, *Executive Secretary*, 515 Busse Highway, Park Ridge, Ill.

October 22–23: 1962 Scientific Session, American Cancer Society. Biltmore Hotel, New York City. Address: Director of Professional Education, ACS, 521 West 57th Street, New York 19, N. Y.

October 25–27: Divisional Meeting, American Psychiatric Association. Shoreham Hotel, Washington. Address: Dr. Norman Taub, 3900 Garrison Street, N.W., Washington 16, D. C.

October 26–30: American Heart Association, Inc. Sheraton-Cleveland Hotel, Cleveland, Ohio. Address: Mr. Rome A. Betts, *Executive Director*, 44 East 23rd Street, New York 10, N. Y.

October 27–November 1: American Academy of Pediatrics. Palmer House, Chicago. Address: Dr. E. H. Christopherson, *Executive Director*, 1801 Hinman Avenue, Evanston, Ill.

October 28: Annual Meeting of Association of Clinical Scientists. Statler-Hilton Hotel, Washington, D. C. Address: Dr. Robert P. MacFate, Secretary, 54 West Hubbard Street, Chicago 10, Ill.

October 28–31: 27th Annual Convention, American College of Gastroenterology. Morrison Hotel Chicago, Ill. Address: Mr. Daniel Weiss, *Executive Director*, 33 West 60th Street, New York 23, N. Y.

November 11–14: Association of Military Surgeons of the United States. Mayflower Hotel, Washington. Address: Colonel Robert E. Bitner, Secretary, 1726 Eye Street, N.W., Washington 6, D. C.

November 12–15: 56th Annual Meeting of Southern Medical Association. Hotel Fontainebleu, Miami Beach, Florida. Address: Mr. Robert F. Butts, *Executive Director*, 2601 Highland Avenue, Birmingham, Ala.

December 10–12: National Conference on Air Pollution. Sheraton-Park Hotel, Washington. Address: Public Health Service, U. S. Department of Health, Education, and Welfare, Washington 25, D. C.

December 12–14: Eighth Hahnemann Symposium: Medical Considerations in the Surgical Patient. Sheraton Hotel, Philadelphia. Address: Dr. Wilbur W. Oaks, *Director*, Hahnemann Medical College and Hospital, 230 North Broad Street, Philadelphia 2, Pa.

The Dignity and Tradition of a Gawler Funeral Cost No More Than Ordinary Services

JOSEPH
GAWLER'S
SONS, INC.

FUNERAL DIRECTORS

Wisconsin Ave. and Harrison St. N.W.

Private parking on our premises for over 100 cars

CAPITAL NURSE REGISTRY

(Est. 1910)

Undergraduate
Practical

Nurses
Recommended
by Physicians

All Nurses Have Had Hospital Training

24 Hour Telephone Service

One of Washington's outstanding
Registries, serving physicians
and surgeons since 1910

LICENSED BY DISTRICT OF COLUMBIA

Your Patronage Solicited

Telephone

RAndolph 3-2600 or 3-1771

CLASSIFIED ADVERTISEMENTS

Advertisements under the following headings are charged at the rate of $5.00 for one insertion of 50 words or less; $4.00 each for three insertions; and $3.00 each for six insertions or more. All advertisements are payable in advance; the Editorial Board reserves the right to edit copy. Closing date for new copy, 20th of month preceding date of issue.

Classified advertisements of a professional nature are free to members.

SITUATION WANTED

GENERAL SURGEON, Board-eligible, licensed in D. C., would like to affiliate full or part-time in partnership or with group or clinic. Will furnish full qualifications upon request. Address Box 80, 1718 M Street, N.W. (6)

PHYSICIANS WANTED

MEDICAL OFFICER—Federal Government, Dallas and Boston, $13,510. Moving expenses paid. Duties: adjudication of disability retirement claims; application of physical standards for Federal employment; advisor on selective placement of handicapped. Occasional travel. Position suitable for handicapped individual. Send résumé to Director of Personnel, U. S. Civil Service Commission, Washington 25, D. C.

OTOLARYNGOLOGIST for active ENT practice and two fully equipped office locations, D. C. and Wheaton area. Available as unit or separately. Any reasonable terms for transfer will be considered. Telephone Hudson 3-4600.

FOR GENERAL MEDICINE urgently needed for either part-time or full-time work in well established practice in downtown medical center with idea of permanent association. Address Box 35, 1718 M Street, N.W. (6)

PEDIATRICIAN for part-time work in medical clinic in Southeast Washington. Address Box 46, 1718 M Street, N.W. (6)

REAL ESTATE

FOR SALE OR RENT: Ideal house-office for doctor and family: centrally air-conditioned rambler with 4 bedrooms and full basement; front and back porches; beautiful, fenced yard and shrubs. Located on University Blvd. between Langley Park and Four Corners, Md. Telephone Juniper 8-8700.

OFFICE SPACE AVAILABLE

FOR RENT: Office space, air-conditioned, at 1150 Connecticut Avenue, N.W. Consulting room, 2 examining rooms, secretary's office, large reception room furnished, laboratory, 2 bathrooms, dark room, X-ray room (10 by 15 feet) suitable for other purposes. Internist or dermatologist. Rental, $250. Address Box 57, 1718 M Street, N.W. (6)

FOR LEASE: PROFESSIONAL ARTS BUILDING, 1722 Eye Street, N.W. Will partition to suit tenant. Various-sized units available, from 600 to 2500 sq. ft. Available approximately December 1. For further information telephone MR. KATZ t Executive 3-7630.

FOR RENT: Office space for ENT, ophthalmologist, and subspecialists in attractive, air-conditioned building with other specialists. Non-competitive Baltimore-Washington area; 45 minutes from 5 medical schools; burgeoning community; rural or suburban residence possible. Address Box 91, 1718 M Street, N.W. (6)

FOR RENT: Very desirable dental suite, with or without equipment, in downtown air-conditioned building. Also suitable for medical office. Three operatories, reception room, business office, dark room. Will sublet at reduced rental. Telephone 332-2230.

FOR RENT: Attractive, large, first floor suite, fully air-conditioned, in vicinity of Glebe Road and Lee Highway, Arlington, Va. Private parking lot. Present occupants in building include pediatrician, internist, neurologist and surgeon. On bus route and easily accessible to Washington hospitals. Suitable for more than one doctor. Telephone Jackson 5-8202.

FOR RENT: VIENNA, VA.: Two-year-old building in new block designated for office buildings. First and second floor locations. Ample parking. Vienna's newest and largest dental suite now in building. Square footage flexible. Attractive lease. Telephone MR. COPP, Dunkirk 5-9000 day or Dunkirk 5-9078 evening.

TO SHARE: Furnished office with pediatrician; 700 sq. ft in air-conditioned medical building in Silver Spring. Telephone Juniper 7-6777.

TO SHARE: Will share office space with qualified internist or GP. Air-conditioned suite in new apartment building in a central, redeveloping area. Excellent potential. Address Box 13, 1718 M Street, N.W. (6)

FOR RENT: In-town 5-room office suite fully equipped; complete laboratory. Will rent by hour, day or part-time. Currently used by internist 20 hours week. New building, near George Washington Hospital. Parking spaces available. Address Box 24, 1718 M Street, N.W. (6)

TO SHARE: First floor offices, 600 sq. ft. Need for dermatologist, psychiatrist, orthopedist or neurosurgeon in densely populated suburban area. Rent, $80 month. Location: 1013 University Blvd. East, Langley Park, Md. Telephone 434-3388.

"Cappy"

INTRODUCES THE WASHINGTON AREA **SPECIALISTS** *in collections for Professionals*

I'M
"Cappy"
an Old Fashioned girl with MODERN ideas about bill collecting.

Unless We Collect, There Is No Charge

We offer a complete collection service to bring about prompt payments in a dignified, diplomatic manner for those lacking adequate facilities for enforced collections.

'PHONE 882-2000

CAPITAL CREDIT CORP.

7600 GEORGIA AVENUE, N.W. WASHINGTON 12, D.C.

Classified Advertisements (*Continued*)

FOR RENT: Office suite at 1625 Massachusetts Avenue, N.W.: reception room, 2 private offices, 2 treatment rooms, approximately 950 sq. ft.; air-conditioned. One parking space. Reasonable rental. Telephone Hobart 2-4700 or Randolph 6-1644.

TO SHARE: Offices in Silver Spring in new medical building on Spring Street. Fully furnished and equipped. Full-time nurse. Telephone 588-4820.

EQUIPMENT FOR SALE

BMR MACHINE, Model M Basal Meter, Liebel-Flarsheim; self-calculating basal metabolism apparatus; used very little. Telephone Sterling 3-4482.

W. B. SAUNDERS COMPANY features the following recent books in their full page advertisement appearing elsewhere in this issue:

PARSONS AND SOMMERS—GYNECOLOGY: A useful new guide to management of gynecologic disease

DAVIDSOHN AND WELLS—Todd-Sanford CLINICAL DIAGNOSIS BY LABORATORY METHODS: Explicit guidance on how to perform every possible test

WOLFF—ELECTROCARDIOGRAPHY: Help in understanding and evaluating electrocardiograms in terms of clinical medicine

Surgical Supplies and Equipment

Complete Fitting Service for
Ladies and Men

NELSON KLOMAN SURGICAL SUPPLY CO.
1018 - 18th Street, N.W
Washington 6, D. C.

***Telephone*: FEderal 8-5245**

NURSES REGISTRY

EXPERIENCED UNDERGRADUATES
& PRACTICAL NURSES

Recommended by Physicians
At Your Service for Day or Night Duty
In Washington and nearby area

CALL—RAndolph 6-6706
(A non-profit organization)

"Registered Nurses—For Private Duty"

U. S. EMPLOYMENT SERVICE
PROFESSIONAL OFFICE

GRADUATE NURSES REGISTRY
1000 16TH STREET, N.W.
WASHINGTON 6, D. C.

CALL—DISTRICT 7-1129

24-hour telephone service—
7 days a week

THE GIBSON COMPANY

57 years serving the medical profession

Medical and Surgical Supplies
Hospital, Invalid and Sickroom Supplies
Physiotherapy Equipment
Surgical Fitting Specialists
Expert Medical Equipment Repair Service

1908 K Street, N.W. **Federal 8-2688**

1942 . . . NINETEENTH ANNIVERSARY . . . 1962

PROFESSIONAL BUSINESS MANAGEMENT, INC.

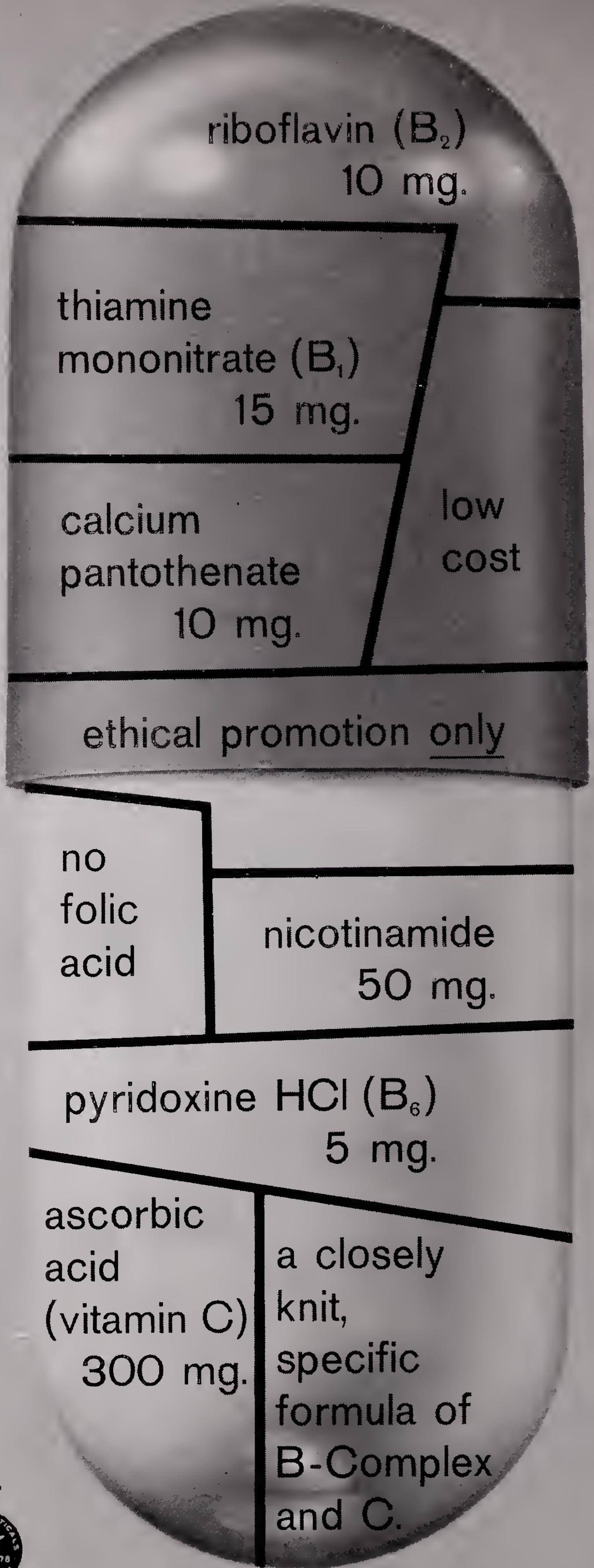
JOHN C. POST, *President*

A PERSONAL SERVICE DESIGNED TO ASSIST THE DOCTOR WITH THE BUSINESS SIDE OF MEDICAL PRACTICE.

• ***Medical Management Specialists*** •

1000 20th Street, N.W. Tel. FEderal 8-3200

this
is
what
Allbee®
with C
is
made
of!


riboflavin (B_2)
10 mg.
thiamine mononitrate (B_1)
15 mg.
calcium pantothenate
10 mg.
low cost
ethical promotion only
no folic acid
nicotinamide
50 mg.
pyridoxine HCl (B_6)
5 mg.
ascorbic acid (vitamin C)
300 mg.
a closely knit, specific formula of B-Complex and C.

A. H. Robins Company, Inc.
Richmond 20, Virginia

INDEX OF ADVERTISERS

Bank *Page*
Riggs National Bank . . . 4

Beverages
Coca-Cola Company . . . 46

Blood Service
Metropolitan Washington Blood Banks, Inc. . . . 53

Books
W. B. Saunders Company . . . 27

Business Counseling
Professional Business Management, Inc. . . . 61

Collection Agencies
Capital Credit Corporation . . . 60
Credit Bureau, Inc. . . . 5

Diagnostic Equipment
Sanborn Company . . . 10

Dietetic Products
Duffy-Mott Company . . . 31
J. H. Filbert, Inc. . . . 38
Jackson-Mitchell Pharmaceuticals, Inc. . . . 41

Funeral Homes
Joseph Gawler's Sons, Inc. . . . 59
S. H. Hines & Company . . . 18

Insurance
Mutual of Omaha . . . 3-C
Russell, Marsh & Kennedy, Inc. . . . 46
St. Paul Fire & Marine Insurance Company . . . 40

Nurse Registries
Association of Undergraduate and Practical Nurse Registry . . . 61
Capital Nurse Registry . . . 59
U. S. Employment Service for D. C. . . . 61

Office Furniture and Supplies
W. D. Campbell Company . . . 6
Mallorey Office Supply Company . . . 58

Pharmaceuticals
Abbott Laboratories . . . 14-15, 19-20, 56-57
Ames Company . . . 21
Bristol Laboratories . . . 50-51
The Brown Pharmaceutical Company . . . 43

Page
Burroughs Wellcome and Company . . . 25, 64
E. K. Cook & Company, Inc. . . . 16
Davies, Rose & Company . . . 39
Charles C. Haskell & Company . . . 49
Knoll Pharmaceuticals . . . 52
Lederle Laboratories . . . 22-23, 47
Thomas Leeming & Company, Inc. . . . 29
Eli Lilly & Company . . . 34
Parke, Davis & Company . . . 2-C, 3
Pfizer Laboratories . . . 44-45
Physicians Products Company . . . 7
Wm. P. Poythress & Company . . . 30
A. H. Robins Company . . . 33, 62
Roche Laboratories . . . 4-C
Sardeau, Inc. . . . 28
Schering Corporation . . . 37
G. D. Searle & Company . . . 35
Smith, Kline & French Laboratories . . . 55
E. R. Squibb & Sons . . . 12
Upjohn Company . . . 11
Wallace Laboratories . . . 9, 17, 48
Winthrop Laboratories . . . 13, 24, 32, 42, 54

Pharmacies
Higger's Drugs . . . 53
Maxwell & Tennyson . . . 53
Peoples Drug Stores . . . 36

Postgraduate Courses
Hahnemann Medical College & Hospital . . . 43

Sanitariums
Kalorama Convalescent Home . . . 58
Kensington Gardens Sanitarium . . . 8
Laurel Sanitarium . . . 58

Surgical Supplies
Accredited Surgical Sales . . . 58
Beth-Mont Surgical Supply Company . . . 58
Beuchler's, Inc. . . . 58
Birtcher Medical Distributors of D. C. . . . 43
Gibson Company . . . 61
Nelson Kloman Surgical Supply Company . . . 61

RELIEVE THE COLD
SUPPRESS THE COUGH
WITH NEW

'EMPRAZIL-C'
TABLETS

ANTITUSSIVE ▪ DECONGESTANT ▪ ANALGESIC

Each tablet contains:

Codeine Phosphate*	15 mg.
'Sudafed'® brand Pseudoephedrine Hydrochloride	20 mg.
'Perazil'® brand Chlorcyclizine Hydrochloride	15 mg.
Acetophenetidin	150 mg.
Aspirin (Acetylsalicylic Acid)	200 mg.
Caffeine	30 mg.

*Warning—may be habit forming.

Complete literature available on request.

Also available without codeine as
'EMPRAZIL'®
TABLETS

BURROUGHS WELLCOME & CO. (U.S.A.) INC., TUCKAHOE, N.Y.

IMPORTANT ANNOUNCEMENT

NOW -- A NEW PLAN OF INCOME PROTECTION INSURANCE DESIGNED TO SUPPLEMENT YOUR OFFICIAL D.C. MEDICAL SOCIETY PLAN.

OUTSTANDING FEATURES:

- ✓ LIFETIME BENEFITS FOR ACCIDENTS.
- ✓ UP TO AGE 65 FOR SICKNESS.
- ✓ SICKNESS BENEFITS DOUBLE AFTER 5 YEARS OF DISABILITY UP TO AGE 65.

Available only to members now carrying the Basic Plan, Policy Form LMN.

For additional details write or call:

Joseph E. Jones
1666 Connecticut Avenue
Washington 9, D. C.

—

483 - 9005

Mutual
OF OMAHA
INSURANCE COMPANY

MAXIMUM BENEFITS MINIMUM COST

specific
for anxiety
& tension

Librium

The singular specificity of Librium in controlling anxiety and tension has proven to be an advantage in a wide range of disorders characterized by anxiety of varying degrees. Notably effective in patients whose symptoms are primarily emotional, Librium is equally valuable when organic disease is aggravated or prolonged by accompanying anxiety. Coupled with its effectiveness is an outstanding record of safety. Librium has few, if any, of the unwanted side effects associated with tranquilizers and daytime sedatives—no extrapyramidal effects, no autonomic blocking, and no dulling of mental alertness. Consult literature and dosage information, available on request, before prescribing.

the successor to the tranquilizers

LIBRIUM® Hydrochloride—7-chloro-2-methylamino-5-phenyl-3H-1,4-benzodiazepine 4-oxide hydrochloride

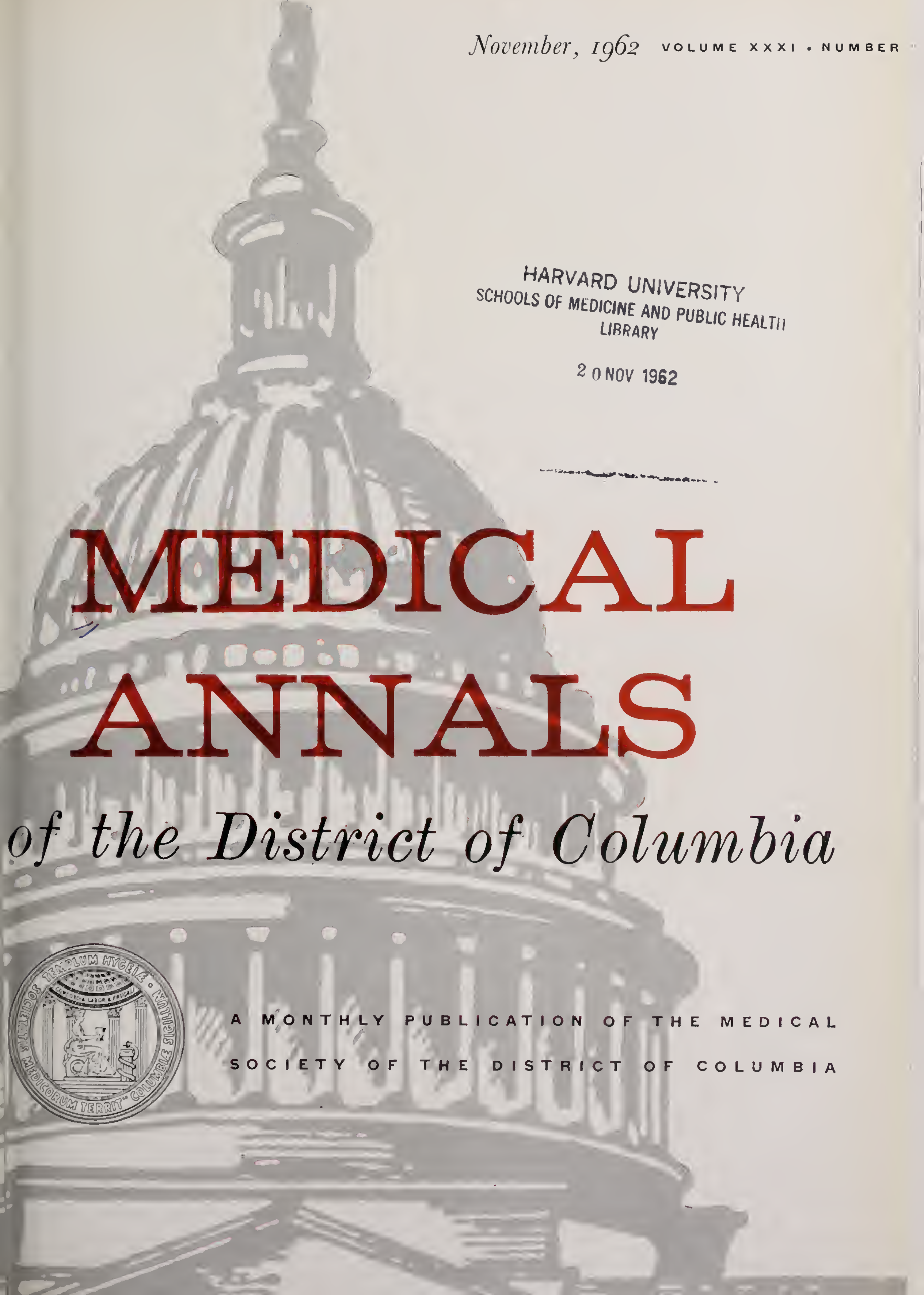
ROCHE

ROCHE

November, 1962 VOLUME XXXI • NUMBER

HARVARD UNIVERSITY
SCHOOLS OF MEDICINE AND PUBLIC HEALTH
LIBRARY

20 NOV 1962



MEDICAL ANNALS

of the District of Columbia

A MONTHLY PUBLICATION OF THE MEDICAL
SOCIETY OF THE DISTRICT OF COLUMBIA

“...the world forgetting, by the world forgot”

DILANTIN®

PERMITS THE EPILEPTIC TO SAVOR THE PLEASURES OF LIFE *“DILANTIN has brought new hope to an entire generation of seizure patients....”[1] By reducing both the incidence and severity of attacks, DILANTIN contributes to a more normal life for the epileptic at home...at work...and at play. In grand mal and psychomotor seizures, DILANTIN is the drug of choice for a variety of reasons: effective control of seizures[1-9] • oversedation not a problem[2] • possesses a wide margin of safety[3] • low incidence of side effects[3] • its use is often accompanied by improved memory, intellectual performance, and emotional stability.[10] DILANTIN Sodium (diphenylhydantoin sodium, Parke-Davis) is available in several forms, including Kapseals,® 0.03 Gm. and 0.1 Gm., bottles of 100 and 1,000. Other members of the PARKE-DAVIS FAMILY OF ANTICONVULSANTS for grand mal and psychomotor seizures: PHELANTIN® Kapseals (Dilantin 100 mg., phenobarbital 30 mg., desoxyephedrine hydrochloride 2.5 mg.), bottles of 100; for the petit mal triad: MILONTIN® Kapseals (phensuximide, Parke-Davis), 0.5 Gm., bottles of 100 and 1,000; Suspension, 250 mg. per 4 cc., 16-ounce bottles. CELONTIN® Kapseals (methsuximide, Parke-Davis), 0.3 Gm., bottles of 100. ZARONTIN® Capsules (ethosuximide, Parke-Davis), 0.25 Gm., bottles of 100.*

This advertisement is not intended to provide complete information for use. Please refer to the package enclosure, medical brochure, or write for detailed information on indications, dosage, and precautions.

REFERENCES: (1) Roseman, E.: Neurology **11**:*912, 1961. (2) Bray, P. F.:* Pediatrics **23**:*151, 1959. (3) Chao, D. H.; Druckman, R., & Kellaway, P.: Convulsive Disorders of Children, Philadelphia, W. B. Saunders Company, 1958, p. 120. (4) Crawley, J. W.:* M. Clin. North America **42**:*317, 1958. (5) Livingston, S.: The Diagnosis and Treatment of Convulsive Disorders in Children, Springfield, Ill., Charles C Thomas, 1954, p. 190. (6) Ibid.:* Postgrad. Med. **20**:*584, 1956. (7) Merritt, H. H.:* Brit. M. J. **1**:*666, 1958. (8) Carter, C. H.:* Arch. Neurol. & Psychiat. **79**:*136, 1958. (9) Thomas, M. H., in Green, J. R., & Steelman, H. F.: Epileptic Seizures, Baltimore, The Williams & Wilkins Company, 1956, p. 37. (10) Goodman, L. S., & Gilman, A.: The Pharmacological Basis of Therapeutics, ed. 2, New York, The Macmillan Company, 1956, p. 187.*

89462

PARKE-DAVIS

PARKE, DAVIS & COMPANY, Detroit 32, Michigan

The

RIGGS

NATIONAL BANK

of WASHINGTON, D. C.

FOUNDED 1836

LARGEST BANK IN THE NATION'S CAPITAL

COMPLETE BANKING AND TRUST SERVICE

RESOURCES OVER $500,000,000

MAIN OFFICE
1503 PENNSYLVANIA AVENUE, N.W.
(Opposite U. S. Treasury)

BRANCHES

FARMERS & MECHANICS
Wisconsin Ave. and M St., N.W.

DUPONT CIRCLE
1913 Massachusetts Ave., N.W.

PARK ROAD
14th St. and Park Rd., N.W.

SEVENTH & EYE STREET
7th and Eye St., N.W.

NORTHEAST BRANCH
1348 4th St., N.E.

SEVENTH & D STREET
318 7th Street, N.W.

NORTHWEST
1779 Columbia Rd., N.W.

FRIENDSHIP
Wisconsin Ave. and Warren St., N.W.

CHEVY CHASE
Conn. Ave. and Morrison St., N.W.

LINCOLN BRANCH
17th and H Sts., N.W.

WASHINGTON LOAN
AND TRUST BRANCH
F St. at 9th, N.W.

17th & G STREET
BRANCH
14th and G Sts., N.W.

FACILITY
WALTER REED ARMY MEDICAL CENTER

TRUST DEPARTMENT OFFICE
1508 H Street, Northwest

Member Federal Deposit Insurance Corporation • Member Federal Reserve System

MEDICAL ANNALS

of the District of Columbia

EDITORIAL OFFICE:
1718 M Street, N.W., Washington 6
Telephone DIstrict 7-3111

Copyright, 1962,
by The Medical Society
of the District of Columbia.

Yearly Subscription, $4.50
Single Number, 50¢

Second-class postage paid at Baltimore, Md.
Published monthly at
Mount Royal and Guilford Avenues,
Baltimore 2, Maryland

Contents for November

SCIENTIFIC ARTICLES

Clinically Undiagnosed Tuberculosis in a Large General Hospital. *Captain James M. Hollister, MC, USA*, Fort Sill, Okla. 617

Delayed Vascular Complications of Renal Biopsy; the Importance of Rapid Processing of Biopsy Material. *Lt. Colonel William R. Beisel, MC, USA, Raymond Scalettar, M.D., and Lt. Colonel Kevin G. Barry, MC, USA*, Washington 626

Involuntary Muscle Involvement (Cardiac and Esophageal) in Myotonia Dystrophica: Report of Case with Congestive Failure and Atonic Esophagus and a Sibling with Congestive Failure. *Elmo F. Masucci, M.D., Hall G. Canter, M.D., and Sol Katz, M.D., F.A.C.P.*, Washington 630

Labor and Delivery Complicated by Dermoid Cysts: Report of Two Cases. *Anna M. L. Van Rooy, M.D., and Albert I. Robins, M.D.*, Washington 638

Food Allergy—A Practical Approach. *Ellis April, M.D.*, Washington 641

EDITORIAL

The Cost of Hospitalization 647

(*Continued on page 6*)

Are You Really Different, DOCTOR?

It's an ironical fact that many patients feel doctors make so much money their bills can be neglected or even completely ignored. But these same patients buy automobiles, television sets, etc.

The doctor's office assistant can help prevent this by (1) checking a patient's record with The Credit Bureau, and (2) using Collectrite Service with those slow-pay patients.

Ask Mr. Kane
at NAtional 8-0680
for information.

ASSOCIATED CREDIT BUREAUS OF AMERICA, INC. MEDICAL CREDITS DIVISION

PHYSICIANS AND DENTISTS ADJUSTMENT SERVICE

A Division of
The Credit Bureau, Inc.
Washington, D. C.

Contents for November

(*Continued*)

MISCELLANY

President's Page: Politics and Medicine 646

Objectives and Program of the AMA Committee on Nursing 650

The Closed Chest Method of Cardiopulmonary Resuscitation: Benefits and Hazards 650

XII International Congress of Dermatology. *Naomi M. Kanof, M.D.*, Washington 651

Cancer Page: Cobalt-60 652

A Report from India: The Second Asiatic Congress of Obstetrics and Gynecology. *Samuel M. Dodek, M.D., F.A.C.O.G., F.A.C.S.*, Washington 653

Public Health Advisory Council 655

"Continuing Care Program" at George Washington 656

News and Personals 657

Membership 662

Medical Annals Staff and Officers of Medical Society *Adv. 16*

Book Reviews *Adv. 28*

National and Regional Meetings *Adv. 52*

Books Received *Adv. 64*

Classified Advertisements *Adv. 66*

Index of Advertisers *Adv. 69*

Specialists in Office PLANNING

The W. D. Campbell Company knows the fine points of business furniture and furnishings. It will pay you to call on our experienced planning and decorating service. No obligation on your part.

Put your problems in the creative hands of our experts.

Phone MEtro. 8–5660

The W. D. Campbell Company

WASHINGTON'S LEADING OFFICE FURNITURE SUPPLIERS, SINCE 1917

1014 Fifteenth Street, N.W. **Washington 5, D. C.**

Free parking in the building

Put your low-back patient back on the payroll

Soma relieves stiffness
–stops pain, too

YOUR CONCERN: Rapid relief from pain for your patient. Get him back to his normal activity, *fast!*

HOW SOMA HELPS: Soma provides direct pain relief while it relaxes muscle spasm.

YOUR RESULTS: With pain relieved, stiffness gone, your patient is soon restored to full activity—often in days instead of weeks.

This was demonstrated by Kestler in a controlled study: average time for full recovery was 11.5 days with Soma, 41 days without Soma. (J.A.M.A. **172**:2039, April 30, 1960.)

Soma is notably safe. Side effects are rare. Drowsiness may occur, but usually only in higher dosages. Soma is available in 350 mg. tablets. USUAL DOSAGE: 1 TABLET Q.I.D.

The muscle relaxant with an independent pain-relieving action

SOMA®

(carisoprodol, Wallace)

Wallace Laboratories, Cranbury, New Jersey

in arthritis: vitamins are therapy

In dealing with the chronic stress of arthritis the physician often faces the problem of nutritional imbalance. High potency B and C supplementation is needed for rapid replenishment of tissue stores of these water-soluble vitamins. STRESSCAPS meet this need and help support the natural metabolic defenses in the disease. Supplied in decorative "reminder" jars of 30 and 100.

Each capsule contains:	
Vitamin B_1 (Thiamine Mononitrate)	10 mg
Vitamin B_2 (Riboflavin)	10 mg
Niacinamide	100 mg
Vitamin C (Ascorbic Acid)	300 mg
Vitamin B_6 (Pyridoxine HCl)	2 mg
Vitamin B_{12} Crystalline	4 mcgm
Calcium Pantothenate	20 mg

Recommended intake: Adults, 1 capsule daily or as directed by physician, for the treatmen of vitamin deficiencies.

LEDERLE LABORATORIES, A Division of AMERICAN CYANAMID COMPANY, Pearl River, N.Y.

STRESSCAPS®

Stress Formula Vitamins Lederle

every
7
seconds

Peoples Drug Stores
Filled A Prescription
In 1961!

R
Phone
HO. 2-1234
PEOPLES
DRUG STORES
PRESCRIPTIONS

PEOPLES DRUG STORES FILLED

4,424,474 PRESCRIPTIONS IN 1961

who
coughed?

HYCOMINE® SYRUP for COUGHS

provides fast and long-lasting cough control

relieves cough in 15-20 minutes • lasts 6 hours or longer • promotes expectoration and decongestion of air passages • rarely constipates • agreeably cherry-flavored

Each teaspoonful (5 cc.) of HYCOMINE Syrup contains:

Hycodan®	6.5 mg.
Dihydrocodeinone Bitartrate (Warning: May be habit-forming)	5 mg.
Homatropine Methylbromide	1.5 mg.
Pyrilamine Maleate	12.5 mg.
Phenylephrine Hydrochloride	10 mg.
Ammonium Chloride	60 mg.
Sodium Citrate	85 mg.

Average adult dose: One teaspoonful after meals and at bedtime. May be habit-forming. On oral prescription where state laws permit. U.S. Pat. 2,630,400.

Literature on request

Endo®

ENDO LABORATORIES
Richmond Hill 18, New York

scratching helps...

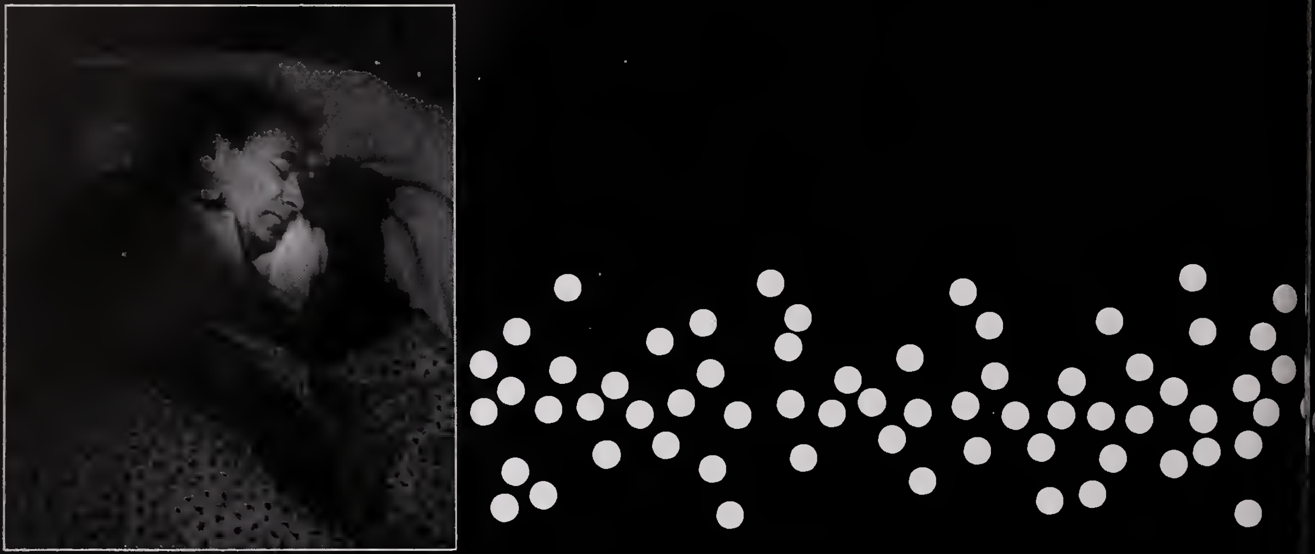
but Calmitol stops itching fast!

For every kind of pruritus—for adults or children—safe, fast-acting CALMITOL Ointment soothes itching on contact, helps prevent secondary trauma caused by scratching. And low-cost, conservative CALMITOL is nonsensitizing. CALMITOL Ointment is available at all pharmacies in 1½ oz. tubes and 1 lb. jars. For more stubborn pruritus, CALMITOL Liquid in bottles of two fluidounces.

THOS. LEEMING & CO., INC., New York 17

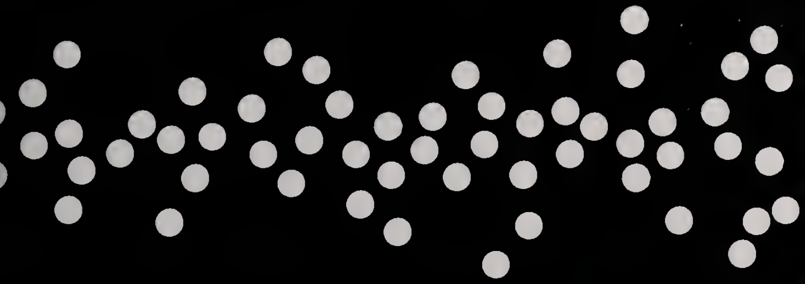
CALMITOL®

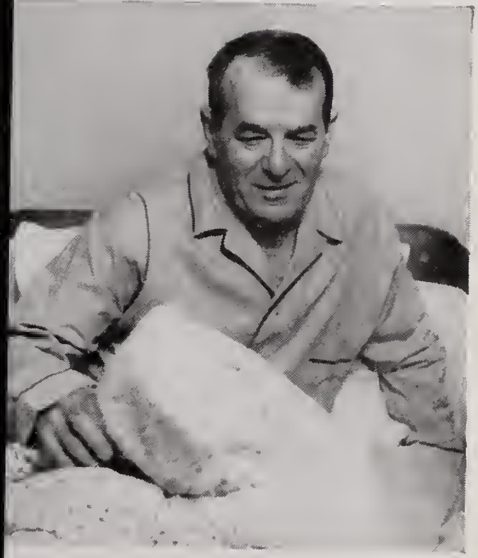
for anything that itches



Thanks to 135 tiny "doses" throughout th

*Trademark, Reg. U.S. Pat.Off.   Copyright 1962, The Upjohn Company





ght, the arthritic wakes up comfortable

Morning stiffness may be reduced or even eliminated as a result of therapy with the only steroid in long-acting form. And the slow, steady release of steroid makes it possible in some cases to reduce the frequency of administration and/or the total daily steroid dosage.

Medrol* Medules*

Each hard-filled capsule contains Medrol (methylprednisolone) 4 mg. Also available in 2 mg. soft elastic capsules.

Supplied in bottles of 30 and 100.

Reminder advertisement.
Please see package insert for
detailed product information.

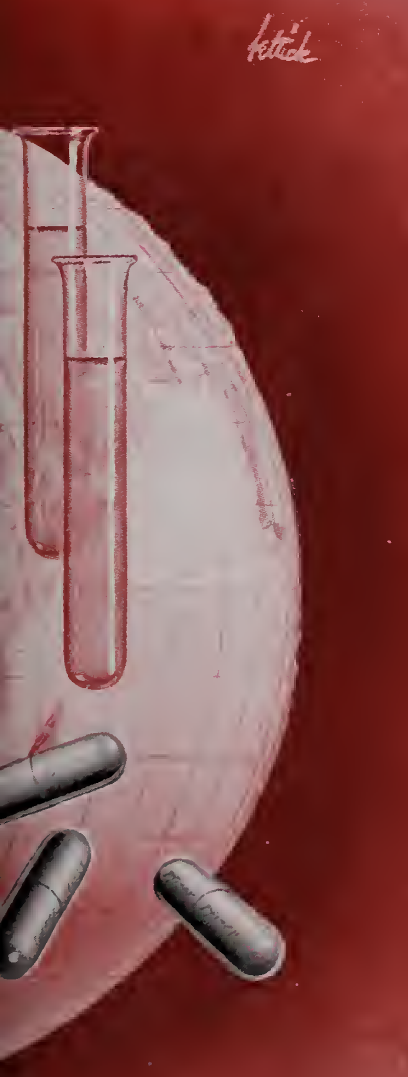
Upjohn

The Upjohn Company, Kalamazoo, Michigan

from boutonneuse fever in Afric

Whether treating boutonneuse fever, bronchopneumonia, or a host of other infections, physicians throughout the world continue to rely on the effectiveness, relative safety, and exceptional toleration of Terramycin in broad-spectrum antibiotic therapy. This continuing confidence is based upon thousands of published clinical reports and successful experience in millions of patients. *The next infection you see will more than likely be "Terra-responsive."*

Science for the world's well-being® Pfizer PFIZER LABORATORIES Division, Chas. Pfizer & Co., Inc. New York 17, New York



IN BRIEF The dependability of Terramycin in daily practice is based upon its broad range of antimicrobial effectiveness, excellent toleration, and low toxicity. As with other broad-spectrum antibiotics, overgrowth of nonsusceptible organisms may develop. If this occurs, discontinue the medication and institute appropriate specific therapy as indicated by susceptibility testing. Glossitis and allergic reactions to Terramycin are rare. For complete information on Terramycin dosage, administration, and precautions, consult package insert before using.

More detailed professional information available on request.

Boutonneuse fever is a tick-borne, acute, febrile disease often affecting children. The bite site becomes a small, necrotic ulcer. A striking macular or maculopapular eruption develops on the trunk, palms and soles. Onset is sudden, with chills, high fever, violent headache and lassitude. The high temperature—up to 103° F.—characteristic of both boutonneuse fever and bronchopneumonia, drops rapidly following initiation of Terramycin therapy.

to bronchopneumonia in D. C.

BRAND OF OXYTETRACYCLINE
Terramycin® capsules · syrup · pediatric drops
intramuscular solution · intravenous

also available with nystatin as TERRASTATIN® (capsules and oral suspension)

MEDICAL ANNALS
OF THE DISTRICT OF COLUMBIA

Editorial and Business Offices: 1718 M Street, N.W., Washington 6, D. C.

Editor

Wallace M. Yater, M.D.

Managing Editor

George W. Cooley

Assistant Editor

A. Louise Eckburg

EDITORIAL BOARD

Frederic G. Burke, M.D.
I. Phillips Frohman, M.D.
Winfred Overholser, M.D.
Thomas M. Peery, M.D.
Herbert P. Ramsey, M.D.
George E. Schreiner, M.D.
Donald Stubbs, M.D.
Charles Stanley White, M.D.

CONSULTING EDITORS

Irving B. Brick, M.D.
Professor of Medicine,
Georgetown University School of Medicine

Captain Thomas E. Cone, Jr., MC, USN
Chief, Pediatric Service, United States Naval Hospital

W. Montague Cobb, M.D.
Professor of Anatomy
Howard University College of Medicine

Vernon Knight, M.D.
Clinical Director, National Institute of Allergy and Infectious Diseases, National Institutes of Health

Walter Kurland, M.D.
Admitting-Personnel Physician,
Veterans Administration Hospital

Colonel Conn L. Milburn, Jr., MC, USA
Director, Walter Reed Army Institute of Research, Walter Reed Army Medical Center

Alvin E. Parrish, M.D.
Associate Professor of Medicine, and Associate Dean,
George Washington University School of Medicine

Colonel Frank M. Townsend, MC, USAF
Director, Armed Forces Institute of Pathology

THE MEDICAL SOCIETY OF THE DISTRICT OF COLUMBIA
1962
OFFICERS

J. Spencer Dryden, *President*
Karl C. Corley, *President-elect*
Frank S. Pellegrini, *First Vice President*
Naomi M. Kanof, *Second Vice President*
Mr. George W. Cooley, *Secretary-Treasurer*

EXECUTIVE BOARD

James W. Watts, *Chairman, term expires 1962*
W. LeRoy Dunn, *term expires 1963*
Victor R. Alfaro, *term expires 1964*
Duane C. Richtmeyer, *term expires 1965*

Ex Officiis

J. Spencer Dryden
Raymond T. Holden
Karl C. Corley
Mr. George W. Cooley, *Secretary*

BOARD OF CREDENTIALS

Edward W. Nicklas, *Chairman, term expires 1962*
William A. Howell, *term expires 1963*
Luther W. Gray, *term expires 1964*

DELEGATES

American Medical Association

Raymond T. Holden
C. Willard Camalier, Jr.
Clifton R. Gruver, *Alternate*
Thomas M. Peery, *Alternate*

LEGAL COUNSEL

Warren E. Magee

what your patients need to know about Aspirin

As you know, the confidence your patients place in a certain treatment or drug often helps to reinforce the relief they get from it. That's why it's often a good idea to explain the reasons for your recommendations, even in the simplest cases.

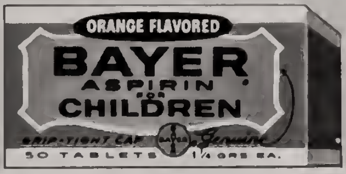
For example, aspirin. You probably recommend it more than any other drug, as an analgesic, as an antipyretic, as an aid to sleep when restlessness is caused by minor discomforts. Certainly aspirin is the most versatile and one of the most effective drugs in the arsenal of medicine.

But aspirin is such a common and such a safe drug that most laymen vastly underrate it. To use it with the utmost confidence, they need to know more about it. So next time, take a minute or two to explain what a uniquely valuable drug aspirin really is. You know it; your patients will be reassured to know it, too.

5-grain tablets

BAYER
ASPIRIN
FAST PAIN RELIEF
BAYER
Genuine

1¼-grain tablets


ORANGE FLAVORED
BAYER
ASPIRIN
FOR
CHILDREN
GRIP-TIGHT CAP
BAYER
Genuine
50 TABLETS
1¼ GRS EA.

For professional samples,
write The Bayer Company,
1450 Broadway,
New York 18, N. Y.

SPECIAL COUGH FORMULA
for Children

Pediacof®

SOOTHING DECONGESTANT AND EXPECTORANT

Each teaspoon (5 ml.) contains:

Codeine phosphate	5.0 mg.
Neo-Synephrine® hydrochloride (brand of phenylephrine hydrochloride)	2.5 mg.
Chlorpheniramine maleate	0.75 mg.
Potassium iodide	75.0 mg.

Bright red, pleasant tasting, raspberry flavored syrup

Dosage:

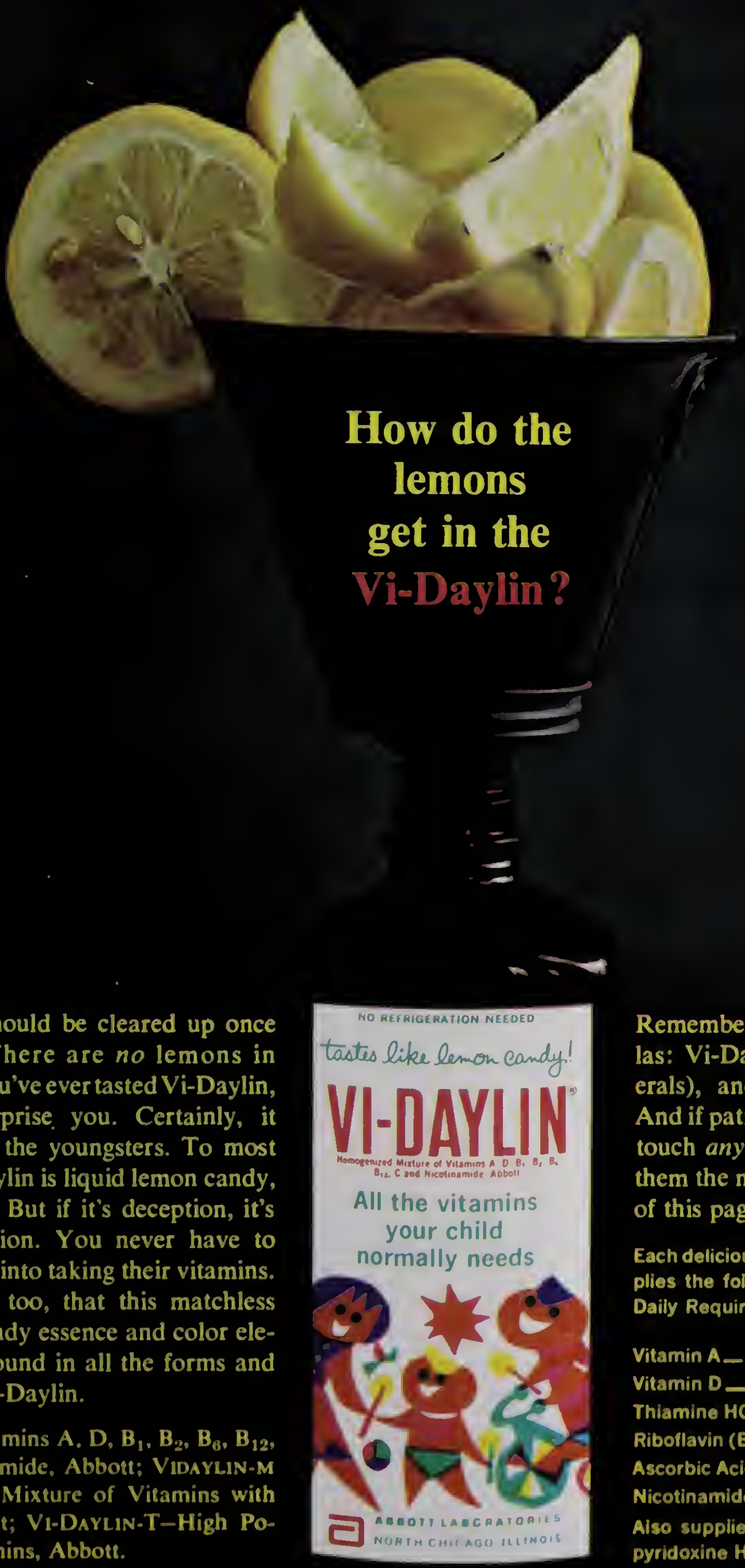
Children from 6 months to 1 year, 1/4 teaspoon; 1 to 3 years, 1/2 to 1 teaspoon; 3 to 6 years, 1 to 2 teaspoons; 6 to 12 years, 2 teaspoons. Every four to six hours as needed.

How Supplied:
Bottles of 16 fl. oz.

Available on prescription only.

Exempt Narcotic

Winthrop
LABORATORIES
New York 18, N Y


NO REFRIGERATION NEEDED
tastes like lemon candy!
VI-DAYLIN®
Homogenized Mixture of Vitamins A, D, B₁, B₂, B₆, B₁₂, C and Nicotinamide, Abbott
All the vitamins your child normally needs
ABBOTT LABORATORIES
NORTH CHICAGO ILLINOIS

How do the lemons get in the Vi-Daylin?

Perhaps this should be cleared up once and for all. There are *no* lemons in Vi-Daylin. If you've ever tasted Vi-Daylin, this might surprise you. Certainly, it would surprise the youngsters. To most of them, Vi-Daylin is liquid lemon candy, and that's *that*. But if it's deception, it's sensible deception. You never have to badger the kids into taking their vitamins. Nice to know, too, that this matchless matching of candy essence and color elegance can be found in all the forms and formulas of Vi-Daylin.

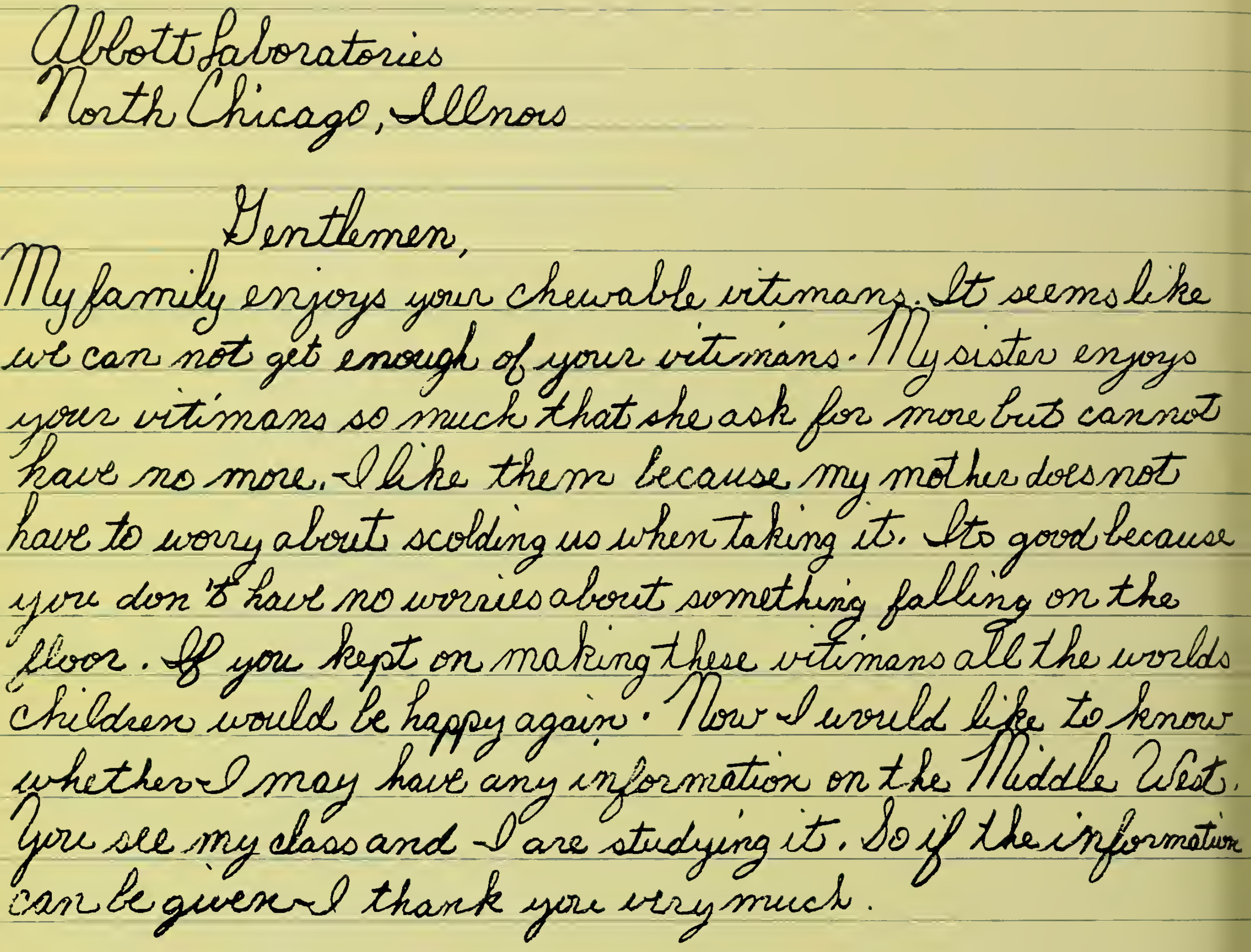
Vi-Daylin—Vitamins A, D, B_1, B_2, B_6, B_{12}, C, and Nicotinamide, Abbott; Vidaylin-M—Homogenized Mixture of Vitamins with Minerals, Abbott; Vi-Daylin-T—High Po-ency Multivitamins, Abbott.

Remember, there are *three* liquid formulas: Vi-Daylin, ViDaylin-M® (with minerals), and ViDaylin-T® (therapeutic). And if patients get a little owlly and won't touch *anything* in a spoon, you can give them the new Chewable (please see back of this page).

Each delicious, 5-cc. teaspoonful of Vi-Daylin supplies the following proportions of the Minimum Daily Requirements of:

		MDR (Children)	MDR (Infants)
Vitamin A	0.9 mg. (3000 units)	1	2
Vitamin D	10 mcg. (400 units)	1	1
Thiamine HCl (B_1)	1.5 mg.	2	6
Riboflavin (B_2)	1.2 mg.	1⅓	2
Ascorbic Acid (C)	50 mg.	2½	5
Nicotinamide	10 mg.	1⅓	2

Also supplies cyanocobalamin (B_{12}) 3 mcg. and pyridoxine Hydrochloride 1 mg.



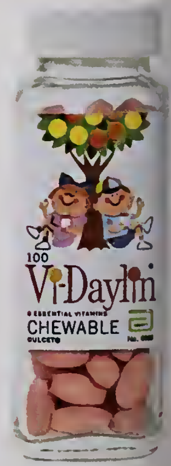
Abbott Laboratories
North Chicago, Illnois

Gentlemen,

My family enjoys your chewable vitimans. It seems like we can not get enough of your vitimans. My sister enjoys your vitimans so much that she ask for more but cannot have no more. I like them because my mother does not have to worry about scolding us when taking it. Its good because you don't have no worries about something falling on the floor. If you kept on making these vitimans all the worlds children would be happy again. Now I would like to know whether I may have any information on the Middle West. You see my class and I are studying it. So if the information can be given I thank you very much.

"...all the worlds children would be happy again."

(an unsolicited testimonial from an actual letter)



ABBOTT

Welcome to another year of Lederle Symposia

Recognizing that the exchange of ideas is fundamental to medical progress, Lederle continues its Symposium program with the 11th year of scheduled meetings. Through these Symposia, sponsored by medical organizations with our cooperation, over 55,000 physicians have had the opportunity to hear and question authorities on important advances in clinical medicine and surgery. You have a standing invitation to attend any of these Symposia with your wife for whom a special program is planned.

SANTA BARBARA, CALIFORNIA
Saturday, November 3, 1962
Santa Barbara Biltmore Hotel

INDIANAPOLIS, INDIANA
Wednesday, November 7, 1962
The Marott Hotel

ANAHEIM, CALIFORNIA
Sunday, November 11, 1962
The Disneyland Hotel

KNOXVILLE, TENNESSEE
Thursday, November 15, 1962
Hotel Andrew Johnson

PHOENIX, ARIZONA
November 18, 1962
Westward Ho Hotel

NEW CITY, NEW YORK
Wednesday, November 28, 1962
Dellwood Country Club

LOS ANGELES, CALIFORNIA
November 29, 1962
Ambassador Hotel

GRAND RAPIDS, MICHIGAN
Saturday, December 1, 1962
Pantlind Hotel

NORFOLK, VIRGINIA
December 6, 1962
Golden Triangle Motor Hotel

DENVER, COLORADO
Sunday, January 13, 1963
The Cosmopolitan Hotel

FORT SMITH, ARKANSAS
Tuesday, January 15, 1963
The Holiday Inn

PORTLAND, OREGON
Thursday, January 31, 1963
The Sheraton-Portland Hotel

ANCHORAGE, ALASKA
Saturday, February 23, 1963
The Anchorage Westward Hotel

DETROIT, MICHIGAN
Wednesday, February 27, 1963
The Sheraton-Cadillac Hotel

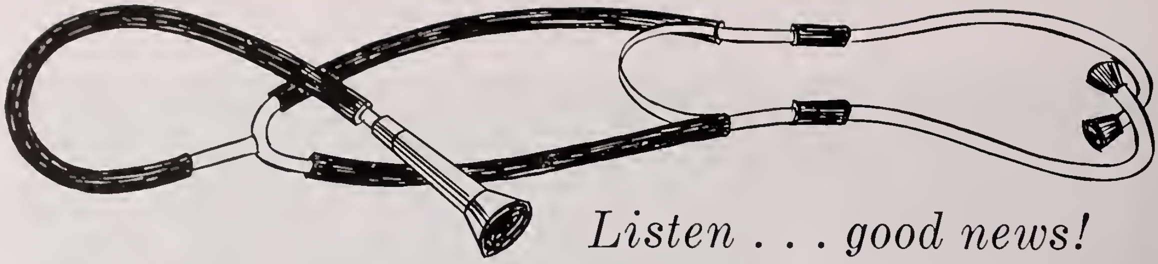
WILMINGTON, DELAWARE
Saturday, March 9, 1963
Delaware Academy of Medicine

HUNTSVILLE, ALABAMA
Thursday, March 14, 1963
The Russel Erskine Hotel

FARGO, NORTH DAKOTA
Saturday, March 16, 1963
The Frederick Martin Hotel
(Moorhead, Minn.)

BELLINGHAM, WASHINGTON
Saturday, March 23, 1963
The Hotel Leopold

LEDERLE LABORATORIES, a Division of AMERICAN CYANAMID COMPANY, Pearl River, N. Y.



Listen . . . good news!

GET BROADER PROTECTION AGAINST CLAIMS RESULTING FROM PRACTICE OF MEDICINE

with St. Paul's Professional Liability Insurance

1. **Broader Protection.** A *St. Paul* policy assures you of complete "professional services" protection.
2. **Absence of Exclusions.** All professional liability policies are not the same. The *St. Paul* policy has only one exclusion—Workman's Compensation as it applies to your own employees.
3. **Experienced, Sound Company.** The *St. Paul* has established an enviable record of competence extending over more than 100 years.
4. **Effective Defense and Prevention.** Close liaison with doctors and medical societies helps the Company to pinpoint areas of risk and to develop educational material which assists doctors in avoiding claims.

For complete information on "broader protection" Professional Liability Insurance see your nearest *St. Paul* agent.

THE ST. PAUL
INSURANCE COMPANIES

Serving you around the world... around the clock

St. Paul Fire & Marine Insurance Company
St. Paul Mercury Insurance Company
Western Life Insurance Company

Approved Carrier of The Medical Society of the District of Columbia

The following Agents are ready to serve you and are as close as your telephone:

M. Abrams & Co., 514 Washington Bldg.
Washington 5, D.C. NAtional 8-6578

Anderson & Company, Inc., 1832 M St., N.W.,
Washington 6, D.C. EM 3-9393

A. H. Baker & Company, 930 Woodward Bldg.,
Washington 5, D.C. EXecutive 3-2460

District Agency Company, 800 Investment Bldg.
1511 K Street, N.W., Washington 5, D.C.
NAtional 8-8756

Eig & McKeever, Agents, 8641 Colesville Road,
Silver Spring, Maryland
Telephone JUniper 8-8200

Feldmann Insurance Agency, 267 Carroll St., N.W
Washington 12, D.C. TUckerman 2-4079

Greater Washington Agency, Inc., 419 Union
Trust Building, Washington 5, D.C.
STerling 3-8383

Harrell Brothers & Campbell, Suite 101,
1757 K St., N.W., Washington 6, D.C.
STerling 3-3555

Insurance Services Co., Inc.
3408 Wisconsin Ave., N.W.
Washington 16, D.C.
WOodley 6-8180

Lampson & Ashley Ins. Agency
7044 Carroll Ave., Takoma Park, Md.
JUniper 5-7166

LeRoy Mark, Inc., 408 Colorado Bldg.,
Washington 5, D.C. NAtional 8-0601

Martens & Moore, 4801 Wisconsin Ave., N.W.,
Washington 16, D.C. EMerson 3-5300

McDermott Insurance, 1130 17th St., N.W.,
Washington 6, D.C. DIstrict 7-1114

Harry Merkin Company, 815 15th Street, N.W.,
Washington 5, D.C. STerling 3-4977

H. Gabriel Murphy & Co., Inc.,
1001 Connecticut Ave., N.W., Washington 6, D.C.
DIstrict 7-9300

Howard W. Phillips & Co., 1820 N St., N.W.,
Washington 6, D.C. FEderal 8-2121

Russell, Marsh & Kennedy, Inc., Marsh Building,
1832 M St., N.W., Washington 6, D.C.
FEderal 8-7600

Victor O. Schinnerer & Co., Inc.
1131 Investment Bldg., Washington 5, D.C.
REpublic 7-1929

Walker & Dunlop Agency, Inc.
905 16th Street, N.W.
Washington 6, D.C.
STerling 3-5050

Watson & Watson, Sheraton Bldg.,
711 14th St., N.W., Washington 5, D.C.
DIstrict 7-7166

Young & Simon, Inc., Suite 340, Woodward Bldg.,
Washington 5, D.C.
DIstrict 7-5180

WASHINGTON, D.C. OFFICE
910 17th St., N.W. Washington 6, D.C.
COMPLETE CLAIMS SERVICE—Tel. 296-4474

sedative-
enhanced
analgesia

or more satisfactory relief of anxiety-aggravated pain

PHENAPHEN®

- More satisfactory than "the usual analgesic compounds" for relieving pain and anxiety.[1]
- More effective than a standard A.P.C. preparation for relief of moderate to severe pain.[2]

Each PHENAPHEN *capsule contains:*

cetylsalicylic acid (2½ gr.)	162 mg.
henacetin (3 gr.)	194 mg.
henobarbital (¼ gr.)	16.2 mg.
yoscyamine sulfate	0.031 mg.

Also available:

PHENAPHEN with CODEINE PHOSPHATE ¼ GR. (16.2 mg.) Phenaphen No. 2

PHENAPHEN with CODEINE PHOSPHATE ½ GR. (32.4 mg.) Phenaphen No. 3

PHENAPHEN with CODEINE PHOSPHATE 1 GR. (64.8 mg.) Phenaphen No. 4

Bottles of 100 and 500 capsules.

. Meyers, G. B.: Ind. Med. & Surg. 26:3, 1957. 2. Murray, R. J.: N. Y. St. J. Med. 53:1867, 1953.

. H. ROBINS CO., INC., RICHMOND 20, VIRGINIA

laking today's medicines with integrity... seeking tomorrow's with persistence.

Robins

NEW!

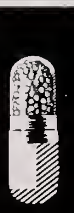
Around the clock relief for DISTRESS OF

COLDS

ISOCLOR® TIMESULE®

A NEW COMPREHENSIVE RELIEF

- **Relief usually starts in minutes**—to open nasal passages, stop running nose and eyes, sneezing, wheezing, itching and post-nasal drip
- **Relief usually lasts up to 12 hours** with a single oral dose
- **Gives both** upper respiratory decongestion and bronchodilatation to relieve chest discomfort
- **With minimal** drowsiness, CNS or pressor stimulation



Isoclor Timesule, actual size

MADE POSSIBLE BY THE NEW TIMESULE RELEASE MECHANISM

Schematic drawing of Timesule cell showing dialysis through permeable coating.

ALSO AVAILABLE:
ISOCLOR TABLETS
AND LIQUID.

Release with the Isoclor Timesule is at a relatively even, constant rate, independent of gastrointestinal motility, pH, or enzymatic activity. Each Timesule pellet is actually a micro dialysis cell, consisting of a drug core with coating of dialyzing membrane of precisely controlled permeability. Approximately 20% of active drugs are released within one hour and 80% in 8 hours. Peaks and valleys of over-release and under-release are minimized for constant, controlled relief with minimum side effects.

EACH ISOCLOR TIMESULE CONTAINS:
Chlorpheniramine maleate . . . . . 10 mg.
d-Isoephedrine HCl . . . . 65 mg.
In a special form providing prolonged therapeutic effect.

DOSE: Adults: One Timesule every 12 hours, or as directed.

WARNING: Use with caution in patients suffering from hypertension, cardiac disease, hyperthyroidism or diabetes. Patients susceptible to the soporific effect of chlorpheniramine should be warned against driving or operating machinery should drowsiness occur.

CHARLES C. HASKELL & COMPANY
Richmond, Virginia
DIV. ARNAR-STONE LABORATORIES, INC.

If you've been thinking of adding your own x-ray service...

get the

PRACTICAL PLAN

from your G-E man...

He gives you more than a "makeshift" layout!

Your G-E x-ray representative works with all kinds of installations. He can judge the type of equipment best suited to the demands of your practice and can help you plan its most efficient arrangement. His detailed layout will take full advantage of dozens of time-and-money-saving details — including suggestions on electric power and wiring requirements, x-ray protective needs, darkroom plumbing and accessories, plus many other recommendations to insure a completely efficient installation.

Your G-E man has earned a reputation among x-ray users as "*the* man who knows x-ray." What's more, he's backed by a full-time staff of specialists in the layout and design of x-ray installations. With this kind of help you can efficiently add x-ray to your practice. An obligation-free survey to start your practical plan can be had by phoning your G-E man at any office shown below.

MAXISERVICE® X-ray Rental opens the way to new x-ray equipment *without capital investment*. We will gladly show you how it provides equipment of your choice on a "pay-as-you-go" basis, for a modest monthly fee.

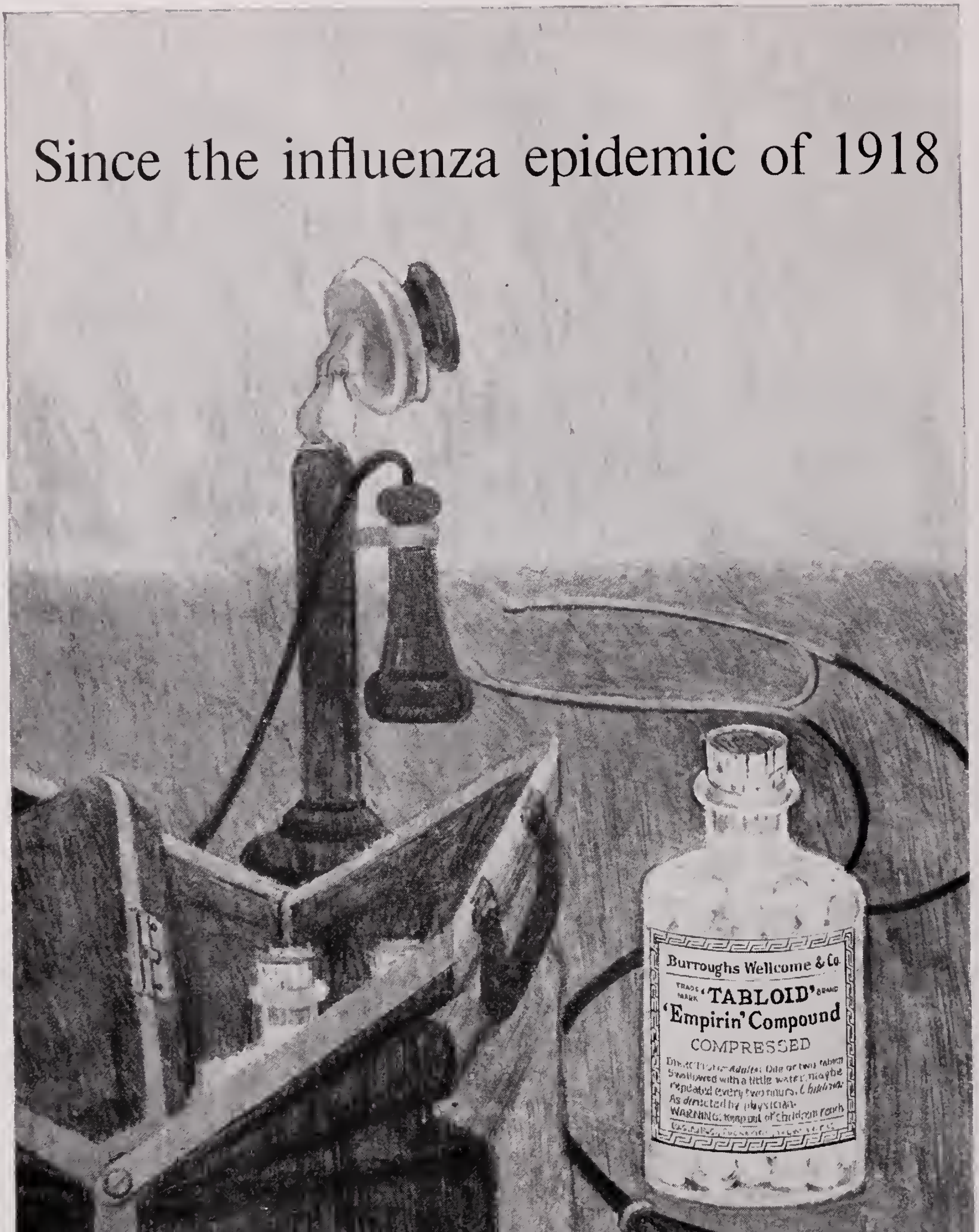
Progress Is Our Most Important Product

GENERAL ELECTRIC

CONTACT OUR DIRECT FACTORY BRANCH AT

SILVER SPRING, MARYLAND

8700 Georgia Ave., N.W. ○ Juniper 9-4355


Since the influenza epidemic of 1918
Burroughs Wellcome & Co.
TRADE MARK 'TABLOID' BRAND
'Empirin' Compound
COMPRESSED

....the first choice of many physicians
to relieve aches, pains, fever, and
general malaise of colds and flu.

Symptomatic and supportive treatment of patients with upper respiratory infections still consists largely of rest, analgesics, fluids and nasal decongestants. During the fateful influenza epidemic of 1918, 'Empirin' Compound was widely used and became well known as a well tolerated and reliable analgesic combination. It was one of the few available analgesic products effective in simultaneously reducing fever and relieving the general malaise which often accompany the flu.

Later, 'Empirin' Compound with Codeine took its place with the widely used 'Empirin' Compound, as a product useful when increased analgesia or antitussive action was desired. Today, 'Empirin' Compound with Codeine is one of the most widely prescribed drugs in medicine, providing physicians with a dependable analgesic, especially useful in relieving the symptoms of colds and flu. We believe you will also find 'Empirin' Compound with Codeine Phosphate gr. ¼ (16 mg.) or gr. ½ (32 mg.) particularly useful in treating the troublesome cough that is often part of the influenza symptom complex.

'EMPIRIN' COMPOUND with CODEINE PHOSPHATE *

gr. ⅛ gr. ¼ gr. ½ gr. 1

100 'TABLOID' 'Empirin' Compound
BURROUGHS WELLCOME & CO
100 'TABLOID' 'Empirin' Compound Codeine Phosphate No. 1
1
100 'TABLOID' 'Empirin' Compound Codeine Phosphate, No. 2
2
100 'TABLOID' 'Empirin' Compound Codeine Phosphate, No. 3
3
100 'TABLOID' 'Empirin' Compound Codeine Phosphate, No. 4
4

* Available on oral prescription where State law permits. Subject to Federal Narcotic Regulations.

BURROUGHS WELLCOME & CO. (U.S.A.) INC., Tuckahoe, N.Y.

BOOK REVIEWS

Gifford's Textbook of Ophthamology 7th ed. Revised by Francis Heed Adler, M.D. Price, $9.00. Pp. 560, illustrated with 288 figures and 26 color plates. Philadelphia: Saunders, 1962.

The seventh (1962) edition of Dr. Francis Adler's revision of Gifford's Textbook of Ophthalmology is an excellent, if not the best, one-volume text on diseases of the eye. It is of particular value to the medical student, the internist, the pediatrician, and the general practitioner, but it is also of considerable value to the ophthalmologist who wishes to refresh his memory painlessly or who is called upon to give talks outside his specialty.

The new text has improved on the sixth (1957) edition by adding an opening chapter on the Symptomatology of Eye Diseases. This lists the probable causes of common symptoms related to vision or to the ocular adnexae and refers the reader to the applicable sections of the following 23 chapters which deal with examination of the eyes and their adnexae and with the diagnosis and treatment of ophthalmologic disorders of both local and systemic origin. Fresh material has been introduced where indicated. The sections on neuro-ophthalmology are particularly good.

Chapters 22 and 23 are devoted to medical and surgical therapy and have the unavoidable shortcoming that some recommendations may soon be outmoded. Ocular injuries and their treatment are discussed in the last (twenty-fourth) chapter. It is to be hoped that physicians outside ophthalmology will not be tempted to attempt repairs beyond their competence.

Robert Day, M.D.

Medical State Board Questions and Answers 10th ed. Harrison F. Flippen, M.D. Price, $9.50. Pp. 507. Philadelphia: Saunders, 1962.

One of the grim and necessary realities for almost every physician is the requirement that he pass a medical board examination for licensure. The popularity of review books to prepare for such examinations is indicated by the publication of several such volumes and the fact that this particular book is now in its tenth edition. Such books have a purely practical purpose and aim at refreshing the reader's mind concerning material once learned in detail and at bringing him up to date on recently acquired knowledge.

Dr. Flippen's book provides answers to specific questions, most of which are presumably taken from actual medical board examinations, rather than a brief summary of each subject upon which candidates are examined. The questions are grouped according to the various basic science and clinical subjects covered in medical board examinations. The answers given to the questions are usually quite short and many are superficial. A number, such as the definition of an infarct or of sarcoma, are partially or totally incorrect. The use of the method of answering specific questions makes the coverage of each field rather hit and miss and lacks the uniform treatment of a concise review of each field.

Considerable effort has been expended to bring the new edition up to date, and this has been accomplished well in regard to viral infections and therapeutic agents. In general, the coverage of the clinical subjects is superior to that of the basic sciences. There is no treatment of the multiple choice type of question employed by several state boards as well as the National Board of Medical Examiners. Lack of space precluded the use of such questions to provide specific information, but the inclusion of the type of questions used would have been advantageous.

The educational value of this type of review is highly questionable; however, it seems certain that books of this nature will continue to be popular for the sake of expediency.

Frank N. Miller, M.D.

The Immunology of Rheumatism. Jerzy B. Kwapinski, M.D., C. Sc., and Marshall L. Snyder, Ph.D. Price, $9.00. Pp. 255. New York: Appleton, 1962.

As important immunologic information is acquired and assumes practical value in the diagnosis and management of the rheumatic processes, the need for a text such as this becomes increasingly apparent. This slender volume ably fulfills the function of providing a basic review of the immunologic fundamentals utilized in rheumatic research and clinical testing.

The details of the serologic procedures commonly employed (e.g., L.E. test, rheumatoid arthritis factors, ASO, CRP, etc.) are "readably" available to the physician, according to the level of his own interest, be it practical familiarity or research intensity. A summary of the immunologic characteristics of each of the major rheumatic diseases is found in the final chapter. Sixty tables amplify the text, and the very careful and extensive bibliography comprises fully one-fifth of the entire volume.

It is to the authors' credit, and the reader's delight, that singleness of subject is maintained throughout, and no superficial digression into other aspects of the vast topic of rheumatology is attempted. Any physician whose interest or practice allies him with the rheumatic diseases will benefit from study, perusal, or referral to this handy text.

Gilbert E. Hurwitz, M.D.

1500 CALORIES

How to get patients to follow your directions for weight control...easily

60 DELICIOUS FOODS THAT CUT CALORIES, FAT AND CARBOHYDRATES!

How often do you sit across the desk from a patient whose problem is overweight, and wonder whether the directions you give for diet will be followed accurately—or at all?

A pleasant and efficient solution to this problem is to recommend the new Mott's Figure Control Foods. This line of over 60 different items has been developed through the latest scientific knowledge in the field of nutrition—and provides foods lower in calories by an average of 50%. Figure Control Foods take the guesswork out of menu-planning. Calorie cutting can be made pleasant and accurate, while eating normal-size portions of the kinds of food people enjoy every day at breakfast, lunch and dinner.

Low carbohydrate, low fat: Meat products have most of the hard fats removed (these are the saturated type) in a way that cannot be done at home. Sauces and dressings are prepared with a high proportion of non-fat milk solids, vegetable colloids; all are delicious and appetizing. Fruits, juices, desserts and sauces are prepared with non-caloric sweetener—natural fruit values are intact.

The carbohydrate, protein and fat content appears on each label, along with calorie counts. Useful for diabetics, too.

Easy medical tool for doctors: No possible dangerous side effects, not even temporary dislocation of meal patterns. Figure Control Foods in supermarkets include: Soups, Meats, Poultry, Sauces, Salad Dressings, Preserves, Syrup, Fruits, Drinks, Desserts, Sweeteners.

New Mott's Figure Control® Foods offer Good Eating at Half the Usual Calories

	Quantity	Figure Control Calories	"Regular" Food Calories
Apple-Grape Drink	½ cup	20	52
Five-Fruit Juice Breakfast Drink	½ cup	20	52
Braised Beef and Vegetables	6½ oz.	184	380
Meat Balls in Brown Gravy	3½ oz.	84	280
Chopped Chicken Livers	1 oz.	31	100
Chicken a la King	3 oz.	72	230
French Style Dressing	1 tbsp.	10½	60
Brown Gravy	1 tbsp.	7	21

	Quantity	Figure Control Calories	"Regular" Food Calories
Applesauce	½ cup	48	90
Fruit Cocktail	½ cup	44	90
Cherry Pie Filling	1 oz.	20	60
Chocolate Topping	1 tbsp.	8	63
Preserves (Peach, Strawberry)	1 tbsp.	9	55
"Maplette" Syrup	1 tbsp.	9	55
Liquid or Powder Sweetener	(to equal 1 tbsp. of sugar)	0	16

MOTT'S FIGURE CONTROL
BEEF SLICES
TOMATO SOUP
LOW CALORIE
PEACHES
VEGETABLE JUICE COCKTAIL
SPAGHETTI SAUCE

Complete menus, recipes, caloric chart available for professional distribution, with weight control guides you can distribute with confidence: all menus meet N.R.C. Recommended Daily Allowances. **Use this handy order form:**

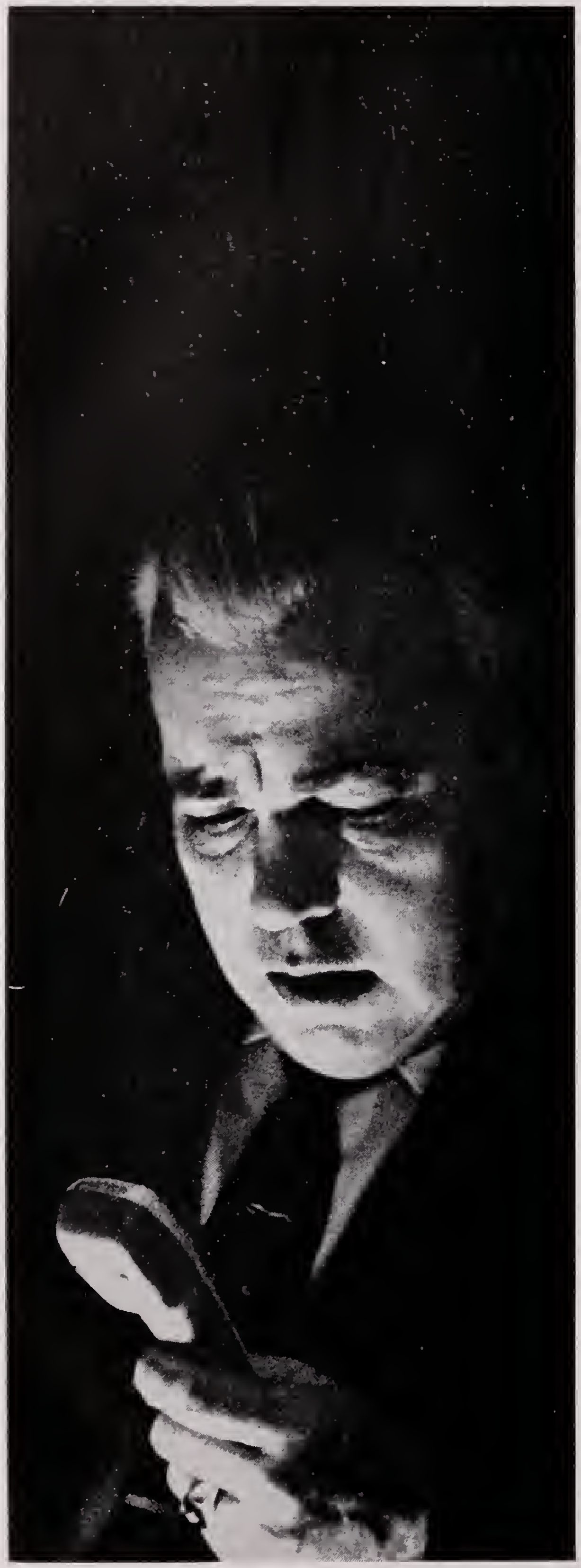
FIGURE CONTROL FOODS
Duffy-Mott Company
370 Lexington Avenue
New York 17, New York

Please send ____ free copies of YOUR WEIGHT CONTROL PLAN for use with patients.

Dr. ____________________

Address: ____________________

City: ____________ Zone: ______ State: ______



Day and night–
less wheezing, coughing, labored respiration in chronic bronchitis and emphysema

New Isuprel Compound Elixir is a balanced expectorant bronchodilator. It contains potassium iodide to promote expectoration and relieve dry cough. Its three bronchodilators, Isuprel, ephedrine, and theophylline, keep bronchi continuously dilated. Luminal is included to negate possible side effect from adrenergic medication and to provide very mild sedation for the patient.

New Isuprel Compound Elixir alleviates symptoms...prolongs relief in chronic bronchitis and emphysema.

Each good-tasting vanilla-flavored tablespoon (15 cc.) contains:

Isuprel® (brand of isoproterenol) HCl	2.5 mg.
Ephedrine sulfate	12 mg.
Theophylline	45 mg.
Potassium iodide	150 mg.
Luminal® (brand of phenobarbital)	6 mg.
Alcohol	19%

Adult Dose: 2 tablespoons 3 or 4 times daily.

How Supplied: Isuprel Compound Elixir is supplied in bottles of 16 fl. oz.

Before prescribing be sure to consult Winthrop's literature for additional information about dosage, possible side effects and contraindications.

New ISUPREL® compound ELIXIR

Winthrop LABORATORIES
New York 18, N.Y.

ISUPREL AND LUMINAL, TRADEMARKS REG. U.S. PAT. OFF

Combination
A
Combination
B
Combination
C

These leading antihypertensive combinations are practically all alike.

This one is different...

because Ser-Ap-Es offers a unique benefit which makes blood pressure control more certain: the central and peripheral antihypertensive actions of Apresoline. By adding Apresoline to the regimens of their patients, Dupler *et al*[1] succeeded in bringing blood pressure down after rauwolfia-diuretic therapy failed. Using Ser-Ap-Es, Hobbs[2] reduced average blood pressure from 175/100 mm. Hg to148/85 mm. Hg in 74 hypertensive patients. Side effects? Rarely a problem with Ser-Ap-Es because effective dosage is low.

SUPPLIED: SER-AP-ES Tablets, each containing 0.1 mg. SERPASIL® (reserpine CIBA), 25 mg. APRESOLINE® hydrochloride (hydralazine hydrochloride CIBA), and 15 mg. ESIDRIX® (hydrochlorothiazide CIBA). For complete information about Ser-Ap-Es (including dosage, cautions, and side effects), see current Physicians' Desk Reference or write CIBA.

1. Dupler, D.A., Greenwood, R.J., and Connell, J.T.: J.A.M.A. 174:123 (Sept. 10) 1960.
2. Hobbs, L.F.: To be published. 2/3020MB

CIBA
SUMMIT, N. J.

WITH YOUR ENCOURAGEMENT

AND

DEXEDRINE®

brand of dextro amphetamine

SPANSULE®

brand of sustained release capsules

she's losing weight

'Dexedrine' *Spansule* capsules not only control appetite all day long, but at the same time encourage normal activity. This is particularly important because overweight patients are often inactive. In such patients 'Dexedrine' overcomes lethargy, helps renew their interest in doing things—not just eating.

PRESCRIBING INFORMATION

INDICATIONS AND DOSAGE: For the following indications, the recommended daily dosage is one or two 'Dexedrine' *Spansule* capsules, usually taken in the morning: control of appetite in weight reduction; depressive states; alcoholism. In narcolepsy, the recommended daily dosage is up to 50 mg. of 'Dexedrine' by 'Spansule' capsule on arising.

SIDE EFFECTS: Insomnia, excitability and increased motor activity are infrequent and ordinarily mild.

CAUTIONS: Should be used with caution in patients hypersensitive to sympathomimetic compounds; in cases of coronary or cardiovascular disease; and in the presence of severe hypertension.

CONTRAINDICATIONS: Hyperexcitability; agitated pre-psychotic states.

SUPPLIED: 5 mg., 10 mg. and 15 mg., in bottles of 30. (Each capsule contains dextro amphetamine sulfate, 5 mg., 10 mg., or 15 mg.)

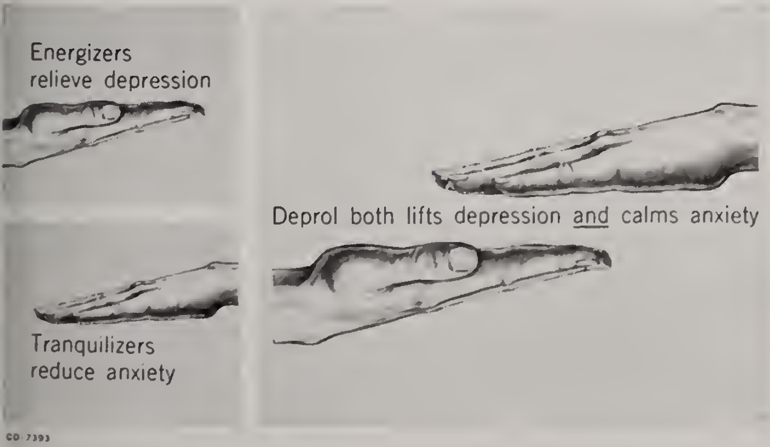
Prescribing information adopted January 1961.

Smith Kline & French SK&F *Laboratories*

LIFTS DEPRESSION ...AS IT CALMS ANXIETY

"I feel like my old self again!" Balanced Deprol therapy has helped relieve her insomnia and fatigue – her normal energy, drive and interest have returned.

Brightens mood...relaxes tension


Energizers relieve depression
Tranquilizers reduce anxiety
Deprol both lifts depression and calms anxiety

Dosage: Usual starting dose is 1 tablet q.i.d. When necessary, this may be increased gradually up to 3 tablets q.i.d. With establishment of relief, the dose may be reduced gradually to maintenance levels.

Composition: 1 mg. 2-diethylaminoethyl benzilate hydrochloride (benactyzine HCl) and 400 mg. meprobamate.

Supplied: Bottles of 50 light-pink, scored tablets.

Write for literature and samples.

▲Deprol▲®

WALLACE LABORATORIES
Cranbury, N.J.

CD-7393

Logical support for the atherosclerosis diet

A recent report* in the *JAMA* on atherosclerosis states, "...it appears logical to attempt to reduce high concentrations of cholesterol and other serum lipids as an experimental therapeutic procedure."

Since this report recognizes table spreads as an important source of dietary fat, it is in your professional interest to know about the fatty-acid composition of the margarines from Mrs. Filbert's.

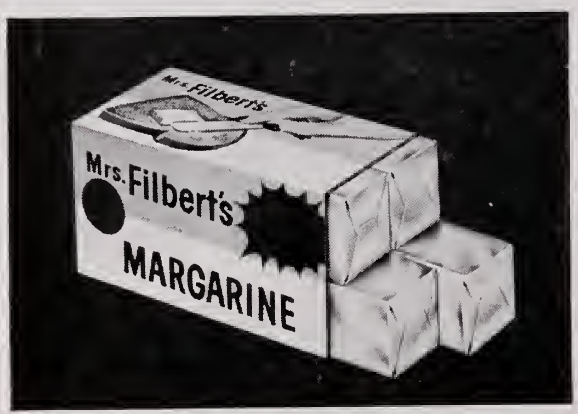
Each of Mrs. Filbert's Margarines is over 80% unsaturated and offers unique properties useful in the control of serum lipids by dietary means.

Moreover, when you recommend any one of Mrs. Filbert's Margarines, your patient is assured of unmatched taste and flavor satisfaction—an important consideration in promoting adherence to any therapeutic regimen.

*AMA Council on Foods and Nutrition: The Regulation of Dietary Fat, *JAMA* 181: 411-423 (August 4, 1962).

Mrs. Filbert's
100% CORN OIL
CORN OIL MARGARINE

Mrs. Filbert's Corn Oil Margarine is made from 100% corn oil, over 50% of which retains its *liquid* characteristics. Because of its high linoleic content, its ratio of polyunsaturates to saturates exceeds 1.5 to 1 . . . and equals the highest level available today in *any* corn oil margarine. Of the total fatty-acid content, 28% is cis-cis linoleic acid. Thus, it can be most useful in a program for reducing serum cholesterol levels.



Mrs. Filbert's Margarine is a popular, conventional-type margarine with no premium price. It is made from the finest domestic vegetable oils, which are partially hydrogenated for texture, but remain over 80% unsaturated. It has a ratio of polyunsaturates to saturates in excess of 1 to 1. Of the total fatty-acid content, 7% is cis-cis linoleic acid.

2 EXTRA STICKS
Mrs. Filbert's
whipped margarine

Mrs. Filbert's Whipped Margarine contains the same number of calories per pound as ordinary margarine, but contains 30% *fewer calories per pat* because it is whipped. When spread normally, it provides satisfaction with a reduction in fat calories. And its ratio of polyunsaturates to saturates exceeds 1 to 1. Of the total fatty-acid content, 7% is cis-cis linoleic acid.

If you would like information about Mrs. Filbert's family of margarines—including detailed listings of their component characteristics—please write us.

J. H. FILBERT, Inc.
Baltimore 29, Maryland

Schering

when "flu" strikes

relieve U. R. I. distress rapidly

- relieve sneezing, runny nose
- ease aches and pains
- lift depressed feelings
- reduce fever, chills

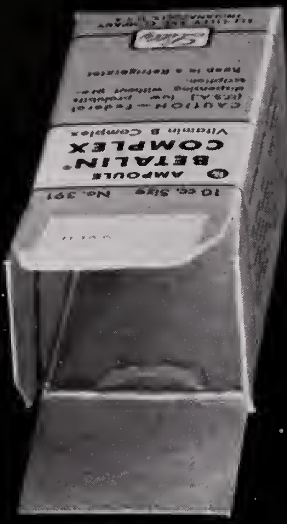
For complete details, consult latest Schering literature available from your Schering Representative or Medical Services Department, Schering Corporation, Bloomfield, N. J.

℞ CORIFORTE®
(Brand of Analgesic-Antihistaminic-Antipyretic Compound)
capsules

Each CORIFORTE Capsule contains:

CHLOR-TRIMETON® ..... (brand of chlorpheniramine maleate)	4 mg.
salicylamide	0.19 Gm.
phenacetin	0.13 Gm.
caffeine	30 mg.
methamphetamine hydrochloride	1.25 mg.
ascorbic acid	50 mg.

available on prescription only



the case of the missing ampoule

People aren't perfect—neither are machines. Both can slip up occasionally. Take an ampoule in a paper carton for example. How can we be absolutely sure that the ampoule is really inside? ■ Here's how: A machine folds the carton, inserts the ampoule, seals the carton, and then places it on the finishing line. Further down the line, the detective waits—a jet of air sweeping across the finishing line just strong enough to blow an empty carton off the belt. Properly filled cartons proceed for further inspection and packaging. ■ Perhaps a small point, but it is another in a long series of control measures designed to deliver quality pharmaceuticals every time.

Eli Lilly and Company • Indianapolis 6, Indiana, U.S.A.

Lilly

290326

MEDICAL ANNALS
of the District of Columbia

November 1962 VOLUME XXXI • NUMBER 11

Clinically Undiagnosed Tuberculosis in a Large General Hospital

CAPTAIN JAMES M. HOLLISTER, MC, USA*
Fort Sill, Oklahoma

SINCE 1900 there has been a marked reduction in tuberculosis mortality with a less dramatic though continued decline in morbidity.[1] Tuberculosis is probably still the most important infectious disease, resulting in approximately 14,000 deaths and 70,000 new cases each year in the United States.[2] A number of sources have verified, however, that more and more persons dying with tuberculosis had not been reported to health authorities.[3] The first knowledge of this infection may be from the death certificate.[4] In many instances, no doubt, a report is never made because an autopsy that might disclose tuberculosis is not performed.

It has long been recognized that there is perhaps an even greater source of infection than the individual with known tuberculosis; this is the patient on the general medical ward with unrecognized infection.[5] Some have estimated that in this group the disease might be ten times as prevalent as in the general population.[6] Unrecognized and unhealed tuberculosis is concentrated in individuals over 45 years of age, a group which has been termed the "disregarded seedbed" of the tubercle bacillus.[7]

This paper summarizes our experience with clinically undiagnosed tuberculosis in patients coming to autopsy at the Washington Hospital Center, an 800-bed modern general hospital which has been in operation since early 1958. Except for occasional patients admitted for thoracic surgery this hospital does not encourage the admission of patients with known tuberculosis. Severely ill patients with active tuberculosis or patients who are diagnostic problems, although they may be suspected of having acid-fast disease, may be admitted for evaluation and initial therapy.

MATERIAL

All autopsy protocols during the years 1958 through 1961 were reviewed and the clinical records on all patients with the pathologic diagnosis of active or unhealed tuberculosis were studied. During the period covered by this review, approximately 60 per cent of all patients who expired underwent postmortem study. For the purposes of this study only those cases of clinically unrecognized disease were accepted in which histologic sections demonstrated the presence of acid-fast bacilli morphologically compatible with *Mycobacterium tuberculosis.* This series, therefore, does not reflect the true incidence of tuberculosis in the autopsy population. A number of patients with pulmonary scarring, calcifications, or pleural thickening, which might well have been tuberculous initially, were generally ignored in recording the diagnoses. A number of patients showed granulomatous lesions but acid-fast bacilli could not be demonstrated. Such cases were also not included.

---

* Formerly senior resident in internal medicine at the Washington Hospital Center, Washington, D. C.

RESULTS

Of 22 patients found to have good pathologic evidence of tuberculosis at autopsy during these years, a total of 14 patients (64 per cent) had not been clinically diagnosed prior to their demise. All but two of these were initially admitted to the Medical Service. Nine of the 14 were private patients.

Table 1 summarizes the incidence of clinically unrecognized tuberculosis in relation to the hospital autopsy statistics during the years 1958–1961.

GROUP I. PULMONARY TUBERCULOSIS

Five of the 14 clinically undiagnosed cases were noted to have tuberculosis confined to the lungs. Table 2 summarizes some of the data on these patients. Cases 1 and 2 are reported here in more detail.

REPORT OF CASES

Case 1. A. L., a 76-year-old white woman, was admitted to this hospital in January 1961 in a moribund condition. She had been ill for several months at home with anorexia, weight loss, vague abdominal pains, and vomiting. Dyspnea developed and the patient subsequently became poorly responsive.

Examination revealed an extremely dehydrated, cachectic elderly woman with a temperature of 101.2°F, a pulse rate of 100, and a blood pressure of 70/45. Rales were heard at both lung bases, and the liver was palpable below the costal margin.

Laboratory studies included a hemoglobin of 11.5 Gm. per 100 ml., and a white blood cell count of 21,893 with

TABLE 1

Tabulated Summary of Cases of Clinically Undiagnosed Tuberculosis Compared with the Hospital Autopsy Statistics

1958-1961

	1958*	1959	1960	1961	Total
Total no. autopsies	354	518	535	510	1917
Definite tuberculosis	3	5	6	8	22
Clinically recognized	1	2	3	2	8
Not diagnosed prior to death	2	3	3	6	14†

* First autopsy at this hospital performed March 14, 1958.

† Of 14 patients found to have tuberculosis only at autopsy, 7 were women (50 per cent), with average age of 72 years. This is a much higher percentage of women than found in the overall autopsy population (18 per cent) in the 70 to 79-year age group. Eight of these 14 patients (57 per cent) were Negro, with average age of 67 years. Normally only 13 per cent of autopsied patients in the 60 to 69-year age group are Negro.

TABLE 2

Patients with Clinically Undiagnosed Pulmonary Tuberculosis Discovered Only at Autopsy

Case No.	Patient	Age	Sex	Race	Survival after Final Admission	Clinical Pulmonary Diagnosis	Pulmonary Disease at Autopsy
1	A. L.	76	F	W	45 hours	Bacterial pneumonia	Bilateral chronic fibroid tuberculosis
2	L. G.	51	M	W	2 weeks	Pulmonary metastases	Active bilateral tuberculosis
3	I. C.	73	F	W	18 hours	Bacterial pneumonia, left lung	Lobar pneumonia, left lung; empyema; tuberculous foci, mostly left upper lobe
4	J. K.	84	F	W	7 days	Terminal pulmonary edema	Pulmonary edema; bronchiectasis, bronchopneumonia, and active tuberculosis, right lower lobe
5	D. B.	41	F	N	45 hours	Bacterial pneumonia, right lung	Lobar pneumonia, entire right lung; chronic active tuberculosis, right apex

NOTE: No patient had a tuberculin test recorded.

62 per cent segmented forms and 28 per cent bands. A roentgenogram of the chest (figure 1) showed obliteration of both costophrenic angles by either thickened pleura or fluid. Partially calcified densities radiated from both lung roots. Calcified scars were also noted in the left upper lobe. Associated with the central scars were softer bilateral lesions which were believed to represent "active bilateral pneumonia." The patient was treated for presumed bacterial pneumonia but died 45 hours after admission.

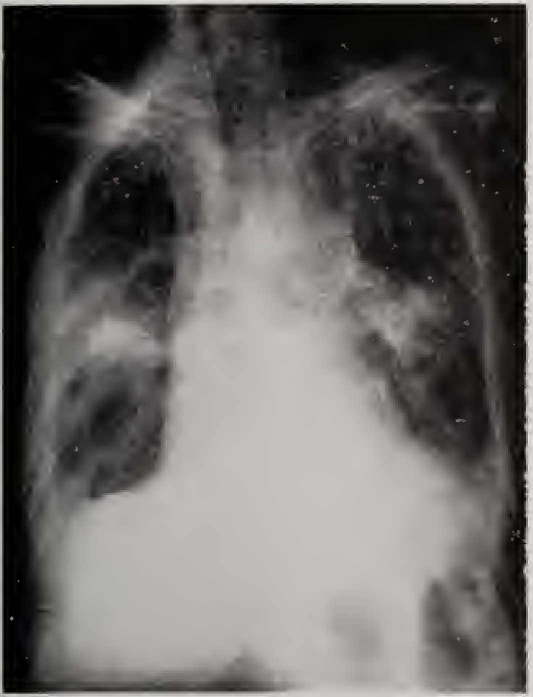


FIG. 1. Case 1. Bilateral pulmonary lesions which proved at autopsy to represent extensive chronic fibroid tuberculosis.

Autopsy revealed pulmonary tuberculosis of the chronic fibroid type involving both lungs. Bilateral pleural adhesions and right hydrothorax were also noted. Numerous firm, poorly defined areas with necrotic centers were distributed throughout both lungs, the largest being 4 cm. in diameter. Microscopic sections revealed many discrete and coalescent granulomas with central areas of caseation necrosis. Acid-fast bacilli were demonstrable throughout the tissue.

This patient represents one who apparently died from unrecognized tuberculosis, having been ill for a long period of time, possibly infecting those about her. She probably could not have been saved, however, even if the diagnosis had been made immediately upon admission. It is significant that four other patients in this series were so severely ill on admission that death occurred within 48 hours.

Case 2. L. G., a 51-year-old white man, was hospitalized for neurosurgical evaluation in September 1959 because of central nervous system complaints. At craniotomy a malignant oligodendroglioma was discovered and excised. A roentgenogram of the chest at that time was unremarkable. The patient improved postoperatively and was discharged.

One and one-half years later (March 1961) he was readmitted because of lightheadedness and vomiting. Fever was present at this time and ranged from 99 to 101° F daily. The white blood cell count varied from 9,000 to 11,500 with 69 to 84 per cent segmented forms. A chest film on March 16, 1961 (figure 2) showed nodular densities disseminated throughout the entire right lung with a few similar nodules on the left. The radiology report stated the changes were "most suggestive of metastatic tumor." The skin test for histoplasmosis produced a 2.5 cm. area of erythema. A tuberculin test was not performed. A scalene node biopsy was unremarkable. Roentgenographic studies of the gastrointestinal tract, gallbladder and kidneys failed to reveal any evidence of malignancy. By April 4, 1961 the chest X-ray film showed generalized increase in the nodular

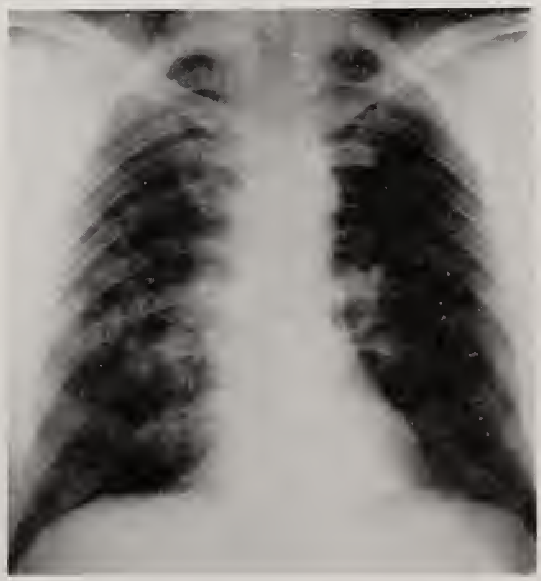


FIG. 2. Case 2. Multiple nodular densities in both lungs which proved at autopsy to be due to active bilateral tuberculosis.

densities with areas of confluence in the region of the right hilum. The patient was discharged with the diagnosis of "metastatic lung tumor" and "possible histoplasmosis."

On April 9, five days after discharge, he was readmitted because of cough, yellow sputum, and weakness with frequent falls at home. Examination at this time revealed the patient to be in moderate distress with a blood pressure of 110/70, a pulse rate of 100, and crepitant rales in the lung bases. The temperature rose to 102.6°F daily. More X-ray films of the chest were still interpreted as "multiple areas of metastases in both lungs" despite suggestion of cavitation in the region of the superior segment of the right lower lobe. The patient died two weeks after admission.

Autopsy revealed recurrent oligodendroglioma in the right frontal lobe with edema of the brain and moderate cerebellar pressure cone. The lung disease proved to be active bilateral tuberculosis. Numerous indistinct nodular areas of induration were present throughout the lungs, most marked in the right hilar region. Microscopic sections showed areas of necrosis of bronchial wall and parenchyma with typical changes of tuberculosis.

This patient's history illustrates one major factor in many cases of unrecognized tuberculosis: misinterpretation of X-ray shadows.[8, 9] Despite the obvious febrile course for at least one month the possibility of tuberculosis was apparently not seriously considered. The radiologist's report stressed the possibility of metastatic neoplasm and this was the clinical impression. Whether the "metastatic disease" was considered secondary to the oligodendroglioma is uncertain from the clinical records, but this possibility seems unlikely.

GROUP II. EXTRAPULMONARY TUBERCULOSIS

Tuberculosis may involve any part of the body, and the principal manifestations may therefore be those of a systemic illness or may be predominantly related to one organ. Although the primary lesion is most often located in the lung, there may be no evidence of pulmonary disease when the extrapulmonary involvement becomes clinically apparent. Moffett[10] has stated that the most important factor in the early diagnosis of extrapulmonary tuberculosis is "a high index of suspicion together with full appreciation of tuberculosis as a generalized disease."

Nine patients were discovered to have extrapulmonary disease at autopsy without sufficient clinical recognition to warrant the use of antituberculous chemotherapy prior to death. Table 3 summarizes some of the data on these patients. In five instances the disease was relatively localized (cases 6 to 10). In four other instances, however, there was evidence of widespread dissemination involving many organs (cases 11 to 14). Three illustrative case histories are presented here in more detail.

Case 8. P. H., a 70-year-old Negro, was admitted to this hospital in July 1960 because of weakness and anorexia for two weeks, and dyspnea and slight cough for three days associated with some ill-defined precordial discomfort. Mild exertional dyspnea had been present for three years.

Examination revealed a dyspneic and tachypneic elderly man with a temperature of 103.4°F, a blood pressure of 100/70, and a cardiac rate of 140 per minute. Significant physical findings included distended neck veins, carious teeth, mild pulmonary emphysema, inspiratory rales at both lung bases, rapid atrial fibrillation, a liver edge 4 cm. below the right costal margin, and slight edema of the legs.

The hemoglobin was 11.8 Gm. per 100 ml., and the white blood cell count was 14,250 with 81 per cent segmented forms, 4 per cent bands, and 1 per cent metamyelocytes. Microscopic pyuria was present. The urine culture yielded a mixed flora. The electrocardiogram showed atrial fibrillation with a ventricular rate of 150 per minute and occasional ventricular ectopic beats. A roentgenogram of the chest revealed cardiac enlargement and moderate pulmonary congestion. An intermediate strength P.P.D. skin test was negative.

The patient was treated for congestive heart failure and probable urinary tract infection. With digitalization the heart rate slowed down, and the rhythm became normal. Dyspnea and high fever continued, however, and nine days after admission left pleural and pericardial friction rubs became audible. Signs of bilateral pulmonary consolidation developed at the lung bases, and the possibility of a purulent bacterial process with spread to the pleura and pericardium was considered. High doses of penicillin seemed to result in some improvement in the fever and in the pulmonary signs. Blood cultures were sterile.

The course thereafter was one of persistent fever with temperatures of 99 to 101°F daily, leukocytosis of 13,000 to 23,000, and hemolytic anemia (with a drop of hemoglobin to 8 Gm. per 100 ml., a reticulocytosis of 8 to 15 per cent, an increase in indirect bilirubin, a shortened red cell survival time with radioactive chromium studies, and an erythrocytic hyperplasia in the bone marrow). Despite subsequent general improvement the pericardial rub persisted. The possibility of tuberculosis was considered but it was believed less likely than other conditions. During X-ray examinations one month after admission the patient died suddenly.

TABLE 3

Patients with Clinically Undiagnosed Extrapulmonary Tuberculosis Discovered at Autopsy

Case No.	Patient	Age	Sex	Race	Survival in Hospital	Clinical Diagnosis	Tuberculin Test	Pertinent Autopsy Findings
6	W. W.	85	M	N	10 days	Uremia; prostatic hypertrophy	None	Nephrosclerosis; hyperplasia, prostate; miliary tubercles—liver and spleen only
7	G. B.	74	M	N	3 days	Pneumonia; prostatic hypertrophy	None	Bacterial lobar pneumonia, two lobes; tuberculosis—confined to the prostate
8	P. H.	70	M	N	4 weeks	Pericarditis, etiology uncertain	Intermediate P.P.D. negative	Pulmonary emboli, multiple; tuberculous pericarditis; miliary lesions of lungs
9	C. C.	61	M	N	18 hours	Septicemia, shock	None	Cirrhosis; ? primary bacterial infection; tuberculosis of lymph nodes
10	G. J.	84	F	W	7 days	Subarachnoid hemorrhage	None	Subarachnoid hemorrhage; tuberculosis—in one adrenal
11	A. J.	68	F	N	10 weeks	Unexplained fever	Positive P.P.D.	Widespread miliary tuberculosis
12	G. M.	57	M	N	8 days	Brain tumor	Intermediate P.P.D. borderline	Miliary tuberculosis; tuberculous meningitis
13	M. S.	77	F	N	26 hours	Chronic illness, etiology undetermined; pulmonary embolism	None	Pulmonary embolus; widespread miliary tuberculosis
14	R. G.	75	M	W	3 days	Acute jaundice, etiology undetermined	None	Widespread acute miliary tuberculosis including ampulla of Vater; cholelithiasis

Autopsy revealed that death had been due to massive pulmonary embolism. There were multiple old embolic thrombi in the small branches of the pulmonary artery with old and recent pulmonary infarctions. A significant finding was tuberculosis of the pericardium, associated with a few miliary tubercles in the lungs. The pericardial sac was attached to the heart by multiple fibrinous adhesions and the heart with pericardium weighed 800 Gm. The thickened epicardium was coated with fibrin and revealed multiple granulomas on microscopic section. Acid-fast bacilli were demonstrated.

Although a correct diagnosis might have been established in this patient had he not expired from pulmonary emboli, this case illustrates the problem of pericarditis of obscure etiology.[11] It should be emphasized that tuberculous pericarditis may often occur in the absence of clinically demonstrable disease elsewhere.[12] As in this case, the onset is often insidious, with dyspnea a common presenting complaint. Cardiac arrhythmias, such as atrial fibrillation, may occur in 10 to 26 per cent of cases.[13]

Prominent in this patient's course were the significant hematologic abnormalities including marked leukocytosis and hemolytic anemia. Although the white blood cell count is most often normal in miliary tuberculosis,[10] a number of authors have urged the recognition of tuberculosis, particularly disseminated disease, as a cause of obscure blood disorders.[14] In some instances the hematologic features may dominate the clinical picture. Although pancytopenia may develop with disseminated disease,[11] and bleeding phenomena may occur,[15] significant leukemoid reactions may also be seen.[16] In these situations, unless the tuberculous etiology is recognized, the disease may rapidly progress to fatal termination, and the patient may be treated as a primary hematologic problem, perhaps with steroids.[17] Some workers have stated that a negative tuberculin reaction may occur more often in the form of disseminated disease with prominent hematologic features.[17]

Case 11. A. J., a 68-year-old Negro charwoman, was admitted in June 1959 because of weakness, chills and fever for one week. Hypertension had been documented six months previously, but the patient had been working until the onset of the present acute symptoms.

Examination revealed a lethargic woman with a temperature of 101°F, a pulse rate of 96, and a blood pressure of 150/90. There were numerous carious teeth, slight left anterior cervical lymphadenopathy, medium moist rales in both lung bases, and a faint systolic murmur over the pulmonary area.

The hemoglobin was 9 Gm. per 100 ml., and the white blood cell count 7,000 with 51 per cent segmented forms and 4 per cent bands. Urinalysis revealed 80 mg. per cent albumin, 20 to 25 white blood cells per high-power field, 1 to 3 pus casts, and the urine culture was positive for E. coli. First strength P.P.D. was positive. A roentgenogram of the chest revealed cardiac enlargement, pulmonary congestion, and a tortuous aorta.

The patient was treated with antibiotics because of apparent urinary tract infection. A urinalysis one week later was normal. During the next nine weeks the patient presented a diagnostic problem with persistent fever, rising to 102 to 104°F daily. Administration of multiple antibiotics and complete dental extractions failed to alter the febrile course. Serial white blood cell counts ranged between 6,000 to 10,000 with a slight increase in the segmented forms. Spinal fluid examination two weeks after admission was unremarkable except for a protein of 62 mg. per 100 ml. One urine culture for acid-fast organisms was negative. Chest X-ray films up to three weeks after admission remained unchanged. Tuberculosis had been mentioned only transiently as one of several possibilities prior to the patient's demise ten weeks after admission.

Autopsy revealed miliary tuberculosis involving lungs, heart, spleen, liver, pancreas, kidneys, thyroid and cerebral cortex, with early tuberculous meningitis. Large numbers of acid-fast bacilli were evident. Other findings included terminal bronchopneumonia and generalized arteriosclerosis with slight cardiac enlargement. Death was believed due to the widespread tuberculosis.

Fever of unexplained origin may be due to tuberculosis, particularly when miliary spread has occurred. The patient presented here illustrates the difficulties in diagnosis even when extremely disseminated infection is present. Petersdorf and Beeson,[18] in their review of 100 cases of fever of unexplained origin, found tuberculosis in 11 patients. Nine of their patients had widespread tuberculosis and a variety of clinical pictures.

With the improvement in the prognosis of miliary tuberculosis and the lessened chance of tuberculous meningitis with prompt treatment,[19] it is important to try to establish this diagnosis as early as possible. Delays in recognition are often related to late involvement of organs which might provoke "characteristic manifestations," such as in the lung, the pericardium, or the meninges.[18]

Biehl[19] has stated that the demonstration of miliary lesions in the lungs remains essential for clinical recognition of miliary tuberculosis. In his series of 68 patients with miliary disease the diagnosis was made only at autopsy in seven patients, six of whom showed no lesions in roentgenograms of the chest. Likewise, none of our patients with disseminated tuberculosis had evidence of miliary lesions in the X-ray films. Some instances of miliary pulmonary lesions may not be detectable, however, especially in the "early" stage.[20] Serial studies may be of value in detecting the development of such lesions.

In the absence of detectable pulmonary lesions the use of liver biopsy may be of considerable value,[18, 19, 21] as it might have been in this case, since extensive hepatic involvement was present at postmortem examination. The finding of an elevated serum alkaline phosphatase level, out of proportion to the bilirubin or other liver function tests, may be a clue to the presence of miliary disease in the liver.[21, 22]

Case 12. G. M., a 57-year-old Negro library clerk, was admitted on June 29, 1960 in a confused and disoriented condition. Although he had worked until two days prior to admission he had shown evidence of progressive deterioration in mental functions for six months, and in recent weeks he had complained of headache and was unable to perform his work adequately.

Examination revealed a drowsy, middle-aged man with a temperature of 100.4°F, a pulse rate of 84, and a blood pressure of 160/90. Significant physical findings included some limitation of anterior flexion of the neck, a faint apical systolic cardiac murmur, and bilateral small hydroceles. Neurologic examination demonstrated forced grasping reflex bilaterally and mild unsteadiness on standing and walking.

The hemoglobin was 12 Gm. per 100 ml., and the white blood cell count was 6,000 with 67 per cent segmented forms and 3 per cent bands. A urinalysis was normal. A chest X-ray film showed calcified nodules in the right lung but no "active" disease. The intermediate P.P.D. skin test was borderline positive. The second strength P.P.D. test was implanted, but the patient went to surgery before the result was recorded. The spinal fluid pressure was 400 mm., and it was a crystal clear, colorless fluid. It contained 75 white blood cells per cu. mm., of which 92 per cent were lymphocytes. The protein content was 98 and the sugar 22 mg. per 100 ml. The spinal fluid chloride level was 105 mEq. per liter. Smears for acid-fast organisms were negative, and a routine culture was sterile. The electroencephalogram showed a diffusely abnormal pattern.

The patient became more stuporous, his fever varying between 99° and 101.4°F daily. In the face of a clinical impression of brain tumor the low spinal fluid sugar was questioned as possibly due to laboratory error. Cerebral arteriograms were normal. The pneumoencephalogram was interpreted as showing some distortion of the right lateral ventricle, and craniotomy was undertaken. Exploration of the right frontal area failed to reveal evidence of tumor. The patient's condition deteriorated rapidly and he died one day after surgery.

Autopsy revealed early tuberculous meningitis at the base of the brain with tiny active miliary tubercles in the lungs, the spleen, and the liver. Larger and distinctly older tuberculous granulomas were noted in the lungs, liver, cerebellum, cerebrum, and retroperitoneal lymph nodes. Pertinent associated findings included a hematoma at the operative site and pulmonary edema.

Of interest is the fact that the spinal fluid culture for tuberculosis, reported after death, was negative.

Tuberculous meningitis is a dread complication of miliary tuberculosis, and prior to the days of chemotherapy it was uniformly fatal.[23] Usually the meningitis is the result of rupture of a caseous central nervous system focus into the ventricles or subarachnoid space, the initial focus having been established at the time of an earlier miliary seeding.[24] Although intracranial tuberculomas often do not give rise to symptoms and may be found only at autopsy,[25] they may result in symptoms suggestive of an expanding intracranial lesion unless meningitis occurs following rupture.[24]

With the considerable improvement in prognosis now with prompt therapy[23, 26] the clinician must be alert to the possibility of this condition. This patient showed the typical spinal fluid findings of tuberculous meningitis even though the culture was negative. It was apparently the lack of awareness of the clinical manifestations and the laboratory features of tuberculous meningitis that led to the faulty diagnosis in this case. It should be recalled that although it may begin acutely and resemble the syndrome of "aseptic" meningitis,[27] tuberculous meningitis more often starts, as in this case, in a very insidious manner.[10]

Discussion

These case reports merely serve to demonstrate that tuberculosis is still a common but frequently unrecognized disease which may involve all systems. Similar findings have been reported from a number of other hospitals.[8, 9, 28]

In 1960 an article from Duke University Hospital indicated that of 100 recent consecutive autopsies showing active tuberculosis, 21 of the patients were not suspected of having the disease before necropsy.[28] At the Central Middlesex Hospital in London, England, over the recent decade, at least 24 clinically unrecognized cases were discovered among 128 necropsies on tuberculous patients. In 14 of these cases the illness was so far advanced at the time of admission that the patient did not survive longer than 10 days.[8]

Clinically undiagnosed cavitary tuberculosis has become uncommon with the use of routine chest roentgenograms on hospitalized patients, but caseous foci may still go unrecognized.[9] On the Chest Division at Bellevue Hospital, for example, tuberculosis was not clinically diagnosed in 3.9 per cent of 380 consecutive autopsies in which significant tuberculosis was recorded, often in association with other forms of pulmonary disease.[7] Cavitary disease may be found in a significant percentage of cases of sudden or unexplained death investigated by a medical examiner's office.[29]

A number of reasons are apparent for the lack of clinical recognition of tuberculosis. One reason appears to be a lack of appreciation of the frequency of tuberculosis, especially in elderly patients.[7, 8, 9] At Bellevue Hospital, of 117 cases of clinically unrecognized tuberculosis, 81 per cent were in individuals over 50 years of age.[9] In some instances these older people may have reactivation of previous tuberculous disease, but there is evidence that usually this represents newly developed infection.[30] It is in the elderly that localizing signs and symptoms may be lacking and associated diseases may be the presenting problems. In such instances tuberculosis may be asymptomatic or may pass unrecognized.

The misinterpretation of X-ray shadows is another important factor.[8, 9] Lack of a "typical" picture of tuberculosis should not turn the clinician's thoughts away from the possibility of a tuberculous etiology with every abnormal radiograph. It should also be recalled that at certain stages caseous foci or miliary lesions may not be detectable by X-ray examination.[20] When other pulmonary disease is present the tuberculous focus may not be suspected or may not be recognized even if chest X-ray films are taken. This occurred in three patients in our series (cases 3, 4 and 5). In patients with "pneumonia," if excessive emphasis is placed on an initially negative smear of the sputum for acid-fast bacilli, the possibility of tuberculous infection may not be considered again.[8]

A number of patients may be so severely ill on admission that complete investigative studies cannot be carried out. In these instances if tuberculosis is found at autopsy a report should be made to health authorities for investigation of contacts.

Lack of awareness of the many and varied manifestations which tuberculosis may present is also a factor in under-diagnosing this disease. This is strikingly so in patients with extrapulmonary forms. It is in these difficult problems that all available diagnostic methods must be utilized,[1, 31] including careful sputum or gastric juice cultures and tissue examinations (e.g., biopsy of bone marrow, lymph node, pleura and liver). The tuberculin test should not be neglected.

In the present series of 14 undiagnosed cases the tuberculin test was utilized in only three of nine patients who survived more than 48 hours after arrival. It was definitely negative in one (case 8), but even here only one test strength was employed and this was not repeated. The efficacy of the tuberculin test has been the subject of several reviews recently. Allen et al[31] state that the reported 3 per cent of tuberculous patients who are tuberculin negative has been overemphasized, and in adults it is confined largely to moribund patients in whom the diagnosis can usually be made by sputum smears. Others have noted an increase in the proportion of negative reactors in the older age groups.[32] Ledwith et al[33] reported, however, that although a certain percentage of patients may not react to intermediate P.P.D. (5 tuberculin units), if there is no reaction to P.P.D. No. 2 (250 t.u.), the probability of excluding tuberculosis is increased to 99.3 per cent. Katz et al[34] found that only 1.7 per cent of 416 tuberculous patients failed to react to intermediate P.P.D., but they emphasize that a second intermediate dose should be given if the first is negative. Anergic responses to tuberculin may occur, however, in extremely ill and moribund patients, certain patients with miliary tuberculosis and sarcoidosis, patients on steroids, and those with protracted, remittent fever.[34]

The tuberculin test is of value in following contacts of patients and hospital personnel. A recent conversion to a positive reaction is of significance even in the absence of demonstrable pulmonary disease.

The realization that tuberculosis is present more often than recognized provokes considerable problems in its control. The well-known increased incidence of the disease among doctors, nurses, and other hospital personnel[2, 6] should prompt development of an active control program with serial follow-ups at regular intervals in order to detect early infection. Such personnel may be exposed to more risk of infection on so-called "nontuberculous" wards than on recognized isolation wards.[35] Jacobson et al[6] and others have demonstrated the value of routine chest films on all patients admitted as well as on hospital employees, providing there is careful follow-up on all abnormal films.

With the current agents available for treatment of tuberculosis many lives can be spared if the disease is recognized and treatment instituted promptly. If cases of tuberculosis continue to go unrecognized, one can never expect to eliminate this disease.

SUMMARY

Despite a marked reduction in the mortality rate since 1900 tuberculosis continues to be a common and all too frequently unrecognized disease. Patients on general medical wards with unsuspected or unrecognized tuberculosis may represent an even greater source of infection than those with known disease. Review of the autopsy statistics in a large general hospital over a four-year period revealed 14 patients with clinically unrecognized tuberculosis, including five with pulmonary and nine with extrapulmonary disease.

Tuberculosis is often not diagnosed due to a lack of appreciation of its frequency, particularly in elderly patients, misinterpretation of X-ray shadows, rapid demise of certain patients, lack of awareness of the protean clinical manifestations which tuberculosis may present, and failure to utilize all available diagnostic methods.

In view of the frequency of clinically unrecognized tuberculosis an active control program is recommended for hospitals.

ACKNOWLEDGMENT: I am indebted to Henry W. Edmonds, M.D., Senior Attending Pathologist, Washington Hospital Center, for providing the pertinent autopsy data at this Hospital.

REFERENCES

1. BADGER, T. L.: New Engl. J. Med., 1959, **261,** 30, 74 and 131.
2. GREENBERG, M.: New York J. Med., 1960, **60,** 846.
3. ANDERSON, R. J.: Public Health Rep., 1956, **71,** 194.
4. BOGEN, E., AND KUPKA, E.: Dis. Chest, 1959, **35,** 597.
5. HUDDLESTON, J. F.: New York J. Med., 1960, **60,** 846.
6. JACOBSON, G., HOYT, D. D., AND BOGEN, E.: Dis. Chest, 1957, **32,** 27.
7. MEDLAR, E. M., SPAIN, D. M., AND HOLLIDAY, R. W.: AMA Arch. Intern. Med., 1948, **81,** 501.
8. TREIP, C., AND MEYERS, D.: Lancet, 1959, **1,** 164.
9. MEDLAR, E. M.: New York J. Med., 1947, **47,** 582.
10. MOFFETT, J. B.: Twelfth Annual Symposium on Pulmonary Disease. Denver: Fitzsimons Army Hospital, 1959, pp. 376–93.
11. RAKOV, H. L.: New York J. Med., 1960, **60,** 4071.
12. SCHEPERS, G. W. H.: Amer. J. Cardiol., 1962, **9,** 248.
13. SPODICK, D. H.: AMA Arch. Intern. Med., 1956, **98,** 737.
14. COOPER, W.: Ann. Intern. Med., 1959, **50,** 1497.
15. WIGDERSON, A., KALLMAN, H., AND CANTOR, P. J.: Dis. Chest, 1960, **37,** 118.
16. HUGHES, J. T., JOHNSTONE, R. M., SCOTT, A. C., AND STEWART, P. D.: J. Clin. Path., 1959, **12,** 307.
17. IVERSEN, O. H., AND OFSTAD, E.: Acta Med. Scand., 1960, **166,** 291.
18. PETERSDORF, R. G., AND BEESON, P.: Medicine, 1961, **40,** 1.
19. BIEHL, J. P.: Amer. Rev. Tuberc., 1958, **77,** 605.
20. MEDLAR, E. M., ORDWAY, W. H., AND PESQUERA, G. S.: Ibid., 1943, **48,** 304.
21. KORN, R. J., KELLOW, W. F., CHOMET, B., AND ZIMMERMAN, H. J.: Amer. J. Med., 1959, **27,** 60.
22. GUTMAN, A. B.: Ibid., 1959, **27,** 875.
23. KING, D. S.: New Engl. J. Med., 1955, **262,** 94 and 135.
24. COGAN, S. R., AND BORNSTEIN, J. S.: Ann. Intern. Med., 1959, **50,** 797.
25. KING, A. B.: Bull. Johns Hopkins Hosp., 1959, **104,** 75.
26. VOLJAVEC, B. F., AND CORPE, R. F.: Amer. Rev. Resp. Dis., 1960, **81,** 539.
27. MEYERS, H. M., AND OTHERS: Amer. J. Med., 1960, **29,** 334.
28. JOHNSTON, W. W., SALTZMAN, H. A., BUFKIN, J. H., AND SMITH, D. T.: Amer. Rev. Resp. Dis., 1960, **81,** 189.
29. MEDLAR, E. M.: Arch. Intern. Med. (Chic.), 1947, **80,** 403.
30. KATZ, J., AND KUNOFSKY, S.: Amer. Rev. Resp. Dis., 1961, **84,** 217.

(Continued on page 662)

Delayed Vascular Complications of Renal Biopsy*

The Importance of Rapid Processing of Biopsy Material

LT. COLONEL WILLIAM R. BEISEL, MC, USA
RAYMOND SCALETTAR, M.D.†
LT. COLONEL KEVIN G. BARRY, MC, USA
Washington

PERCUTANEOUS NEEDLE BIOPSY of the kidney has gained widespread acceptance as a diagnostic procedure. The incidence of mortality associated with the procedure has been estimated as 0.3 per cent or less.[1–5] Significant post-biopsy hemorrhage as a complication of this procedure is uncommon. The purpose of this paper is to describe three cases of vascular complication associated with percutaneous renal biopsy, in two of which post-biopsy hemorrhage was a prominent feature.

REPORT OF CASES

Case 1. A 40-year-old white male Army technician was first found to have elevated blood pressures averaging 185/110 upon hospitalization in 1954. At that time the patient was moderately obese and showed the presence of granular casts and white blood cells in the urine. In addition, isosthenuria was present. During the ensuing years the patient was treated with various antihypertensive agents and a reducing diet. Because of the development of morning frontal headaches the patient was readmitted to this hospital in 1959. At this time his blood pressure was found to be 190/120. There was narrowing and focal spasm of the arterioles in the optic fundi with arteriole-venule nicking. Cardiomegaly was detected on physical examination and was confirmed by the X-ray findings of a prominent left ventricular segment and an electrocardiographic pattern typical of left ventricular hypertrophy. Laboratory studies showed a trace of urinary protein, 3 to 5 red blood cells and 3 to 5 white blood cells per high power microscopic field. The blood urea nitrogen was 25 mg. and the serum creatinine 1.8 mg. A phenolsulfonphthalein test showed an excretion of 22 per cent of the injected dye within 15 minutes, with 74 per cent excretion in two hours. Studies of the serum electrolytes, cholesterol, and blood clotting mechanisms were normal. Intravenous pyelograms showed no abnormalities. Urine cultures revealed no significant bacteriuria. A renal biopsy was obtained from the right kidney with the patient in the prone position and the technique as described by Kark and Muehrcke[6] with the Franklin modification of the Vim-Silverman Needle. The purpose of this biopsy was to determine whether an underlying pyelonephritis was present despite negative urine cultures. An excellent specimen was obtained without apparent difficulty. The patient experienced no pain or postoperative hematuria, and his blood pressure and pulse remained stable. Bed rest was maintained for 24 hours and the patient was restricted to his hospital ward for an additional day. Post-biopsy blood pressures were stabilized at the range of 150–170/100–110, essentially unchanged from his pre-biopsy hospitalized blood pressures. Fifty-two hours after the biopsy the patient developed acute right-sided flank pain accompanied by diaphoresis, faintness, and shock. A mass of increasing size was palpable in the right flank. After resuscitation with dextran and whole blood the patient was explored surgically. A large retroperitoneal hematoma was found, with spurts of arterial blood jetting from a single small needle puncture wound in the lower pole of the kidney. This was closed by means of several mattress sutures.

A low power veiw of the biopsy specimen (figure 1) clearly showed the reason for the arterial bleeding, as it contained the cross section of a large intrarenal arteriole which had been severed in obtaining the biopsy. Histologic findings in the remainder of the specimen were

---

* From the Department of Metabolism, Division of Medicine, Walter Reed Army Institute of Research, and the Department of Medicine, Walter Reed General Hospital, Walter Reed Army Medical Center, Washington, D. C.

† Formerly Major, Medical Corps, United States Army; now engaged in the private practice of internal medicine at 2400 H Street, N.W., Washington 7, D.C.

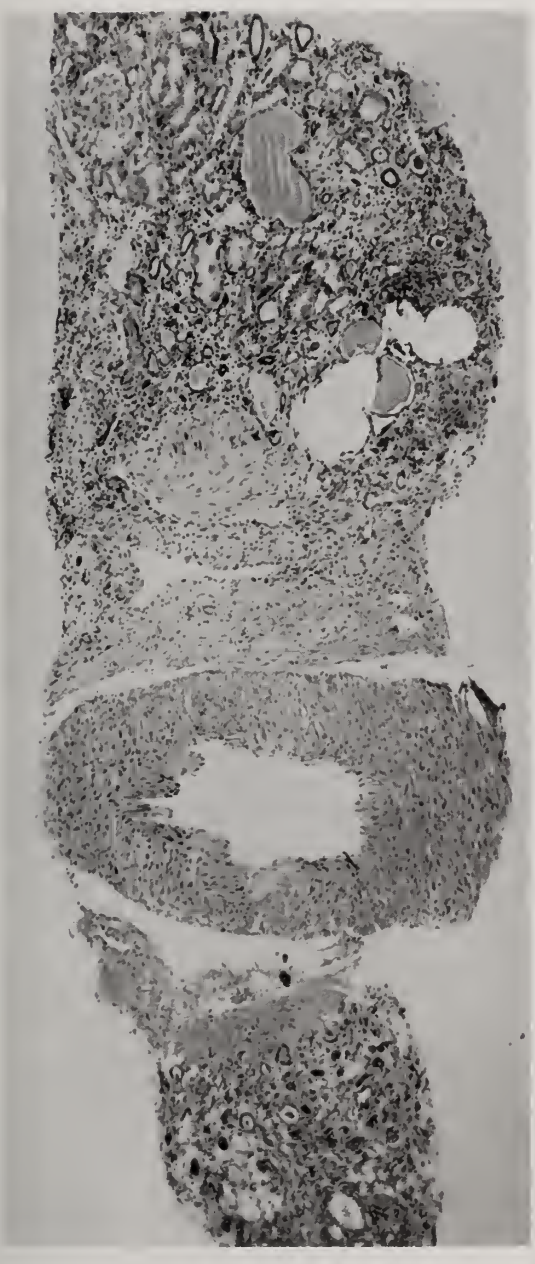


FIG. 1. Low power view of renal biopsy obtained with Vim-Silverman needle from patient no. 1. Note presence of severed arteriole with diameter equal to that of entire specimen. A smaller adjacent venule has also been severed.

typical of chronic pyelonephritis. Despite therapy for this the patient progressed to fulminant hypertension and terminal uremia within one year. At autopsy a 1 cm. hemorrhagic cyst was found at the site of the renal biopsy as the sole manifestation of the hemorrhagic episode.

COMMENT

Bleeding in this patient occurred from an intrarenal arteriole severed by the biopsy needle. Percutaneous renal biopsy is done as an essentially "blind" procedure, and despite every possible attempt to localize accurately the lower pole of the kidney the operator can never be sure of the exact angle or thickness of the kidney with respect to the needle or of the exact tract the cutting blades will make through the kidney as they are rapidly and forcibly advanced. Lack of any evidence of blood pressure, pulse, or vascular instability throughout the accepted post-biopsy period of observation made it appear that the procedure had been entirely uncomplicated. If the biopsy specimen had been processed and examined within the period of observation, recognition of the arteriole injury would have alerted attending physicians to the increased possibility of hemorrhage. Fortunately, the bleeding episode, even though delayed until long after the biopsy, occurred within the hospital where diagnostic, resuscitative, and operative facilities were immediately available.

Case 2. A 27-year-old white male Army sergeant first demonstrated albuminuria on a routine physical examination in 1958. Extensive laboratory studies at the time failed to establish the etiology. Subsequently the patient was studied on two occasions and was hospitalized in April of 1960 because of bilateral flank pain. The patient was moderately obese with a blood pressure of 160/110, but physical examination was otherwise nonrevealing. The urine was consistently positive for albumin with a daily excretion of 1.7 to 4 Gm. Urinary specific gravity was 1.015 following dehydration. The blood urea nitrogen, serum electrolytes, and phenolsulfonphthalein excretion were normal. Urine cultures were negative. Intravenous pyelograms, chest X-ray films, and electrocardiograms were normal, as were studies of the blood coagulation. A renal biopsy was performed in an attempt to establish an etiologic diagnosis after all other methods had failed. The patient had transient gross hematuria upon micturition immediately after his biopsy but experienced no pain, hypotension, or tachycardia. This soon cleared up, and on the third post-biopsy day the patient was on pass when he again developed massive hematuria. He immediately returned to the hospital

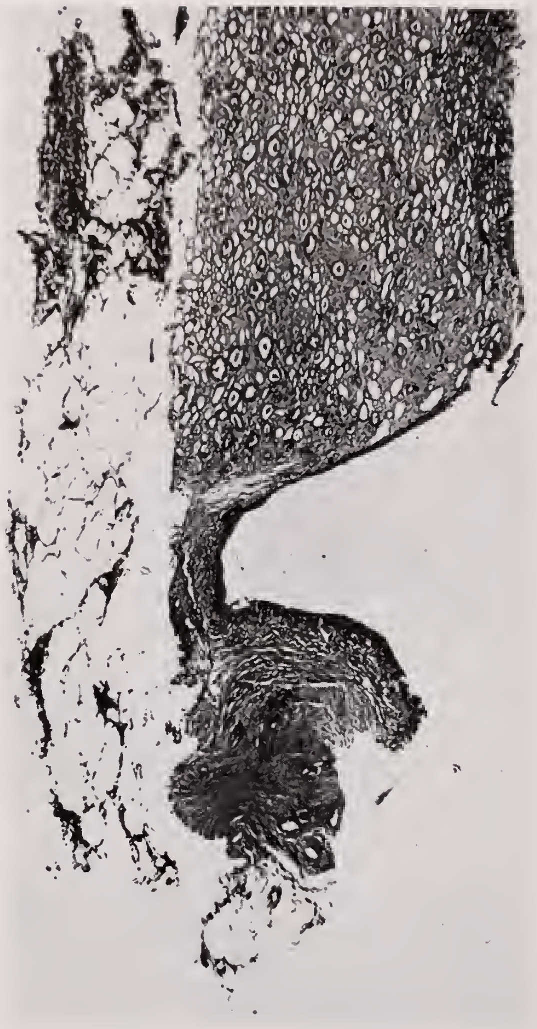


FIG. 2. Distal end of renal biopsy obtained with Vim-Silverman needle. Note large epithelial surface covered by transitional cell mucosa indicating that renal pelvis has been entered.

where blood pressure and pulse were found to be essentially unchanged, but the hematocrit had fallen from 42 to 35 per cent. With conservative management the hematuria stopped after a week, and a follow-up intravenous pyelogram and cystoscopic examination were normal.

The biopsy specimen consisted of medullary tissue only and showed changes suggestive of chronic pyelonephritis. In addition, a long epithelial surface of transitional mucosa (figure 2) indicated that the biopsy needle had removed an area of the renal pelvic wall.

COMMENT

Although slight immediate post-biopsy hematuria was noted, bleeding via the ureter of a major degree did not occur until the third post-biopsy day. Again, the emergency processing of the biopsy material and the recognition that the renal pelvis wall had been included in the biopsy specimen would have alerted the attending physicians to the need for a more prolonged observation of this patient.

Case 3. A 37-year-old Negro had been retired from the Army because of hypertensive cardiovascular disease with enlargement of the heart and some impairment of renal function. The latter was characterized by albuminuria, hematuria, and pyuria. Nine years earlier the patient had had an illness which was compatible with acute pyelonephritis. Four months prior to admission the patient developed progressive blurring of vision, dizziness, syncope, and headaches, with exertional dyspnea, increasing weakness, costovertebral angle pain, nausea and vomiting. The blood pressure was 240/180, and there were multiple fresh hemorrhages and exudates in both retinas with early papilledema and marked arterial spasm. There was isosthenuria with constant albuminuria, microscopic hematuria, pyuria, and casts which were chiefly granular in nature. The blood urea nitrogen was 35 mg., but the serum electrolytes were otherwise normal. Urine cultures showed a consistent recovery of *Aerobacter aerogenes*, and the phenolsulfonphthalein excretion was reduced to 7 per cent in 15 minutes and 32 per cent in two hours. Despite the malignant hypertension a renal biopsy was performed without incident and was diagnostic of chronic pyelonephritis.

Two weeks later the patient complained of pain over the site of the biopsy and an increasing prominence of the area became evident. A systolic bruit which later became continuous (figure 3) could be heard over the left posterior thorax. It was of maximal intensity over the site of the needle wound and could be eliminated by superficial local pressure. Two days prior to death the bruit disappeared spontaneously. At autopsy a traumatic arteriovenous fistula containing a fresh thrombus was found to involve a branch of the subcostal artery and vein below the twelfth rib.

COMMENT

This unusual complication of renal biopsy was of no serious consequence, although it is possible that a similar traumatic AV fistula or aneurysm

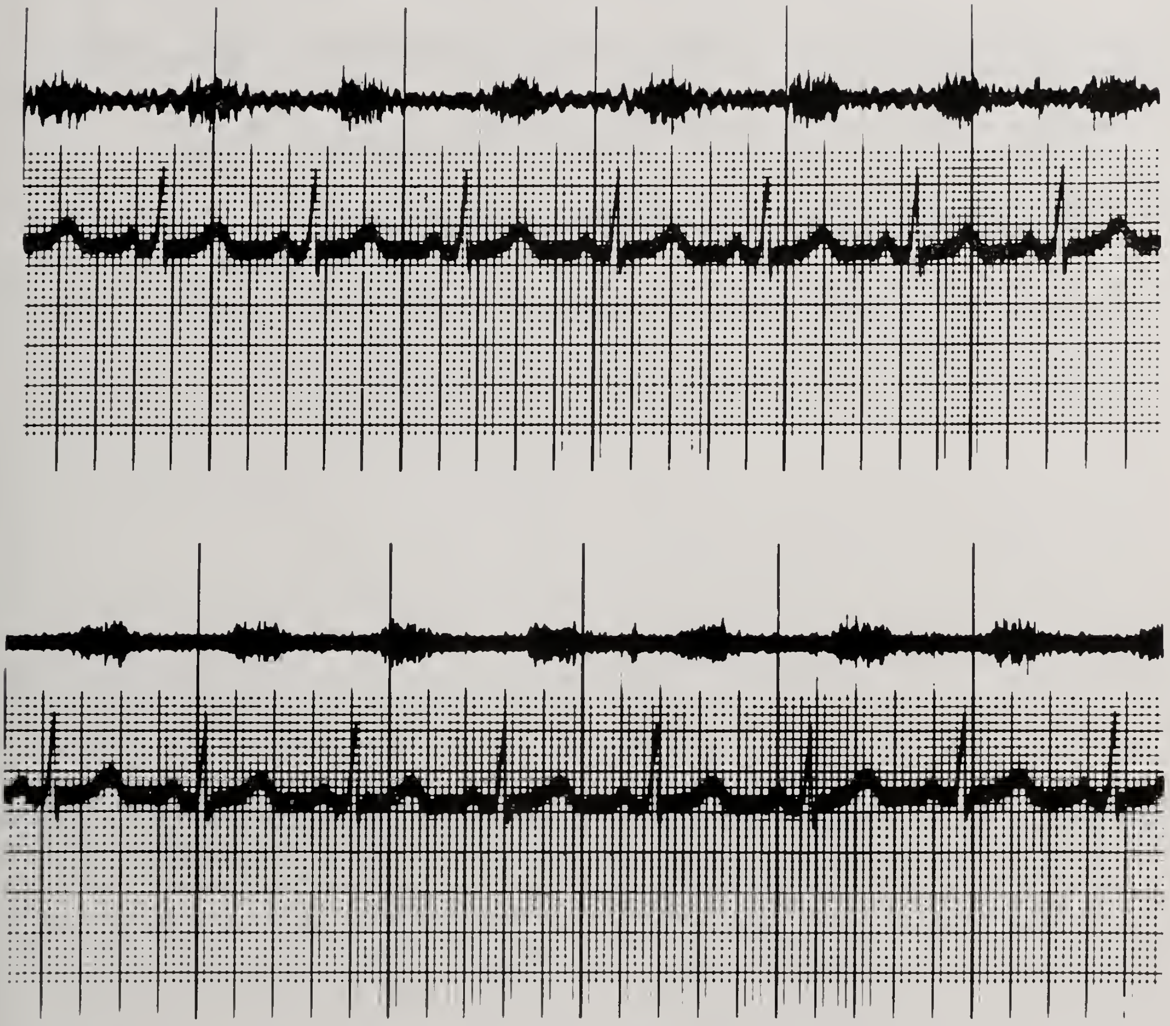


FIG. 3. Phonogram of bruit produced by traumatic AV aneurysm of left twelfth subcostal artery and vein produced during renal biopsy.

could develop within the renal vasculature. Presumably, a large fistula could contribute to cardiac decompensation.

DISCUSSION

Avoidance of complications in renal biopsy procedures is largely dependent upon the careful selection of patients, good technique, and careful pre-biopsy instruction of the patient to insure full coöperation during the procedure. Following the biopsy careful attention must be paid to the pulse rate, blood pressure, development of any untoward symptoms, and the character of the urine to detect immediate complications such as perinephric hemorrhage or gross bleeding via the ureter.

Delayed complications of renal biopsy can still occur despite all precautions and after the accepted periods of close observation. In the cases reported, the complications were unrelated to the patient's basic disease, uremia or hypertension. The potential seriousness of the compli-

(Continued on page 662)

Involuntary Muscle Involvement (Cardiac and Esophageal) in Myotonia Dystrophica

Report of Case with Congestive Failure and Atonic Esophagus and a Sibling with Congestive Failure

ELMO F. MASUCCI, M.D.

Chief, Neurology Section, Veterans Administration Hospital, Washington; Instructor in Neurology, Georgetown University School of Medicine

HALL G. CANTER, M.D.

Clinical Investigator, Veterans Administration Hospital

SOL KATZ, M.D., F.A.C.P.

Chief, Medical Service, Veterans Administration Hospital; Associate Professor of Medicine, Georgetown University School of Medicine

CHANGES IN THE VOLUNTARY MUSCLES constitute the most prominent feature of myotonia dystrophica. However, the occurrence of congestive failure and esophageal dilatation in a patient together with congestive failure in a sibling with myotonia dystrophica interested us in the subject of involuntary muscle involvement in myotonia dystrophica, particularly cardiac, esophageal and diaphragmatic involvement.

A study of case reports of myotonia dystrophica indicates that the involuntary muscles of the heart, blood vessels, skin, diaphragm, and the respiratory, alimentary, endocrine and reproductive systems may be affected. Bradycardia, tachycardia, and electrocardiographic changes have been described. Vasomotor abnormalities occurring in several cases of myotonia dystrophica were reported by Curschmann.[1] Involvement of the autonomic nervous system was described by Hauptmann.[2] Rohrer[3] reported the occurrence of acrocyanosis, indicating that small vessels were involved. Persistent dermatographia was described by Kroh[4] and Stiefler.[5] Chilblains, sialorrhea, and excessive lacrimation have been reported by other authors. Respiratory involvement in the case studies of Fleischer[6] and of Albrecht[7] included an increased tendency to asthma (possibly due to an abnormality of the plain muscles of the bronchi), abnormalities in the larynx, thinning of the posterior palatal vault, limited movement of the soft palate on phonation, and limitation of movement of the vocal cords. Disorders of the alimentary system consisting mainly of esophageal spasm, lack of tone and dilatation have been described by Fleischer and Albrecht. Hirschfield[8] indicated that the action of the esophagus was defective in one of his cases. Tonic spasm of the cardiac sphincter has been encountered occasionally. Abnormal pupillary reactions have been described as representing the most common ocular manifestation next to cataract. These responses have consisted of a rather sluggish reaction to light, slow reaction to light and accommodation, and failure to respond to light after a few repetitions in quick succession.

CARDIAC MANIFESTATIONS OF MYOTONIA DYSTROPHICA

Griffith[9] was probably the first to focus attention on the cardiac manifestations of myotonia in 1911. In 1923 Adie and Greenfield[10] reported 20 cases. They also made an extensive review of the literature and were not impressed with any cardiac abnormalities. However, as a result of their study of the response to electrical stimulation they concluded that the abnormality in myotonia dystrophica was primarily in the muscle fiber rather than in the nerve. Their pathology studies confirmed the impression that there was a characteristic tendency to the formation of chains of nuclei within the muscle fibers.

Ask-Upmark[11] reviewed the cardiac abnormalities in eight cases of myotonia dystrophica and found three instances of members of the same family demonstrating cardiac abnormalities. The cardiac manifestation reported included bradycardia and prolongation of AV conduction. Their theory of the pathophysiology of myotonia differed from that of Adie and Greenfield. They considered that acetylcholine was allowed to act for too long a time at the myoneural junction and that this vagus-like effect would account for the bradycardia and prolonged AV conduction. At about this same time other articles[12, 13] from the foreign literature were describing instances of members of the same family with myotonia dystrophica demonstrating abnormal electrocardiograms in the form of PR prolongation or auricular arrhythmia. Several reviews[14, 15] of the cardiac manifestations of myotonia dystrophica agree that approximately 60 to 70 per cent of patients with myotonia dystrophica will demonstrate electrocardiographic abnormalities, most always prolonged AV conduction, atrial arrhythmia, or, less commonly, nonspecific ST-T changes.

Reports of cardiac abnormalities other than conduction delay or arrhythmia have been rare. Autopsy studies with particular reference to the cardiac lesions have been meager. In the few that have been reported a minority have shown actual muscle lesions that could be called specific.[16]

ESOPHAGEAL MANIFESTATIONS OF MYOTONIA DYSTROPHICA

Difficulty in swallowing is a common manifestation in myotonia. Steinert[17] indicated that it occurred in about one-third of the cases. It was present in four of the seven cases described by Albrecht. According to this author it appeared early in some cases and later in others. Some patients complained of a constant "obstacle" and others of intermittent difficulty. Most patients do not spontaneously complain of swallowing difficulty, possibly because myotonic patients frequently do not pay much attention to their ailments. Psychologic deficiencies probably account for this tendency. Thomasen[18] in one of the largest studies on myotonia indicated that the swallowing difficulty was never so pronounced as to constitute a serious obstacle to the intake of food.

The musculature of the upper third of the esophagus (striated musculature) may be the seat of dystrophy. Thomasen indicated that he had been able to make this observation in three autopsies. Albrecht in a series of seven cases of myotonia dystrophica described four with difficulty in swallowing and esophageal involvement. In case 2 the patient complained of difficulty in swallowing as if there were an obstacle high in the esophagus. On esophagoscopy an obstacle (spasm) was encountered at the entrance of the esophagus, and this could not be overcome. The patient refused permission for reëxamination. In case 3 esophagoscopy was described as meeting resistance at the entrance. The esophagus was dilated, the walls flaccid, thin, and covered with solid secretion. Marked pulsatory movements were evident. Case 4 was characterized by intermittent, marked difficulty in swallowing liquids. Esophagoscopy was easy, but there was some spasm present. The esophagus was dilated, thick, flaccid, and partially covered with secretion. It was possible to see respiratory and pulsatile movements. In case 7 esophagoscopy was easy. The lumen was open. The walls of the esophagus were flattened and atrophic. They were partially covered with pus and showed great pulsation. The walls were described as appearing to have lost all their elasticity. It was Albrecht's impression that the esophageal dilatation in the above cases was due to atrophy of the esophageal musculature since the mucosa seemed to be flaccid as if the musculature did not have the ability to remove secretions. The spasm present at the entrance to the esophagus in three cases was considered to represent myotonic spasm caused by the mechanical stimulus of the esophagoscope. Similar spasm can be caused by eating food and swallowing. In case 4, although entrance to the esophagus was easy, spasm was encountered further down and may have been due to myotonic spasm in the lower esophagus. The esophageal dilatation in these cases was considered by Albrecht to be similar to the picture of diffuse dilatation above a cardiospasm. the difference being that the dilatation in myotonia plays a secondary role since it is due to the atrophy. Terrien, Sainton and Veil[19] described a patient who complained of difficulty in swallowing solids. Fluoroscopic examination revealed that "solid nourishments" stopped for a few moments at the level of the superior third of the esophagus. Lamby[20] described a patient with difficulty in swallowing semisolids. Fluoroscopy revealed slower than normal emptying of the esophagus. The barium remained in the upper portion longer than normal. The lumen of the esophagus seemed to be somewhat dilated. Passage through the cardia was normal. Esophagoscopy was not performed. D'Antona[21] also observed widening of the upper part of the esophagus.

INVOLVEMENT OF DIAPHRAGM IN MYOTONIA DYSTROPHICA

There have been relatively few references to involvement of the diaphragm in myotonia dystrophica. Rouques[22] described a case with unilateral elevation of the diaphragm. Sekiya[23] indicated that the diaphragm was usually involved late in myopathy. Caughey and Gray[24] in a series of 25 cases of myotonia reported three in which the diaphragm was elevated on one side. Bashour, Winchell and Reddington[25] described a case with elevation of the right leaf of the diaphragm with restricted movement of the entire diaphragm. Bilateral elevation of the diaphragm was present in the case report of Benaim and Worster-Drought.[26] Recently, Caughey and Pachomov[27] described two additional cases of myotonia with unilateral elevation of the diaphragm. An interesting feature of one of these cases was a biopsy of the diaphragmatic muscle which revealed definite histologic changes of a dystrophic nature consisting of variation in size of muscle fibers, increase of connective and fatty tissue, and formation of central chains of nuclei. It was the authors' impression that these findings represented definite evidence that the diaphragm might be involved in the same dystrophic process as other skeletal muscles but probably late in the disease process. According to Caughey and Pachomov, partial, unilateral or bilateral elevation of the diaphragm should be considered as a variable feature of myotonia dystrophica.

REPORT OF CASES

Case 1. A 42-year-old white man was admitted to the hospital on January 16, 1961 with the complaint of difficulty in swallowing. On the day prior to admission he had swallowed a large piece of pickle and experienced a sensation as though something were stuck in the throat at the level of the upper larynx. The difficulty in swallowing was first noticed in June, 1960. Periodically he would experience a sensation as if something were stuck in his throat. He experienced no difficulty in swallowing liquids but required special care with solid foods. As a result of

X-ray evidence of a suspicious mediastinal mass, bronchoscopy, esophagoscopy and a scalene node biopsy were performed and failed to reveal evidence of any significant abnormality. Neurologic consultation was requested because of weakness of the upper extremities, bilateral foot drop, and decrease in sexual activity. The patient described the progressive development of weakness of the upper and lower extremities over a 16-year period. Baldness and a noticeable decrease in sexual activity had been present for five years. There had been a 20-pound weight gain during the past year. For six months prior to admission he was aware of ankle swelling in the evening and slept with two pillows. He occasionally experienced shortness of breath upon exertion. There was no history of chest pain, palpitation or hypertension. Family history revealed that a younger brother, aged 39, was recently hospitalized at the Veterans Hospital, Togus, Maine, because of a cardiac condition. He also carried a diagnosis of myotonia dystrophica.

Physical examination revealed a tall, obese, alert, well-oriented individual. The blood pressure was 140/90, and the pulse rate was 80. The heart was enlarged to percussion but was regular in rate and rhythm. There were no murmurs present. The lungs were clear. The abdomen was obese and soft with no palpable masses. The testicles were very small and hard. Frontal baldness was quite prominent. There was marked bilateral atrophy and weakness of the sternocleidomastoid muscles together with temporal and facial muscle wasting, resulting in the typical hatchet-face appearance of the myotonic patient. Gait was steppage in character due to the presence of a bilateral foot drop, more pronounced on the left. In addition to distal weakness of the lower extremities, there was weakness of both the extensors and flexors of the fingers and hands, more pronounced on the left. Abdominal reflexes were active and equal. Cremasteric reflexes could not be elicited. Deep tendon reflexes were active and equal except for the Achilles, which were absent bilaterally. Plantar reflexes were flexor. Sensation was unimpaired. Coördination tests were performed well. A typical myotonic response was elicited on percussion in both thenar areas and in the tongue. Hand clasp revealed some slowing of relaxation of the finger flexors. The fundi were normal. The pupils were regular and equal and reacted promptly to light and accommodation. Movements of the tongue and palate were unimpaired.

Laboratory studies consisting of hemogram, urinalysis, fasting blood sugar, glucose tolerance test, serology, cholesterol, serum electrolytes, radioactive thyroid uptake, and PBI were within normal limits. Complete spinal fluid studies were normal except for a protein of 126 mg. X-ray of the skull revealed no abnormality. An electrocardiogram showed a normal P-R interval and a vertical axis with a widened QRS-T angle in the frontal plane. The chest X-ray film was described as revealing a semi-oval density protruding to the right of the mediastinum. A second film showed the cardio-aortic silhouette to be slightly enlarged, and a definite mediastinal mass, infiltrate or consolidation could not be identified. Slit-lamp examination revealed the presence of discrete, flake-like opacities of various sizes and shapes in the anterior and posterior cortex of both lenses, typical of the cataract of myotonia. Electromyographic studies revealed myotonic patterns and "dive-bombing" sound consistent with myotonia dystrophica. Fluoroscopic studies of the esophagus showed a rapid transit of the barium through the esophagus, stomach and small bowel. The esophagus (figure 1) was widened throughout its entire length and showed poor peristalsis. Puddling of barium was noted in the vallecula and pyriform sinus. No filling defects or ulceration was noted in the stomach. The general muscular tonus of the stomach seemed to be poor with weak peristaltic waves and slight persistent dilatation. The barium emptied readily through the pyloric canal and duodenal bulb. The visualized small bowel appeared somewhat dilated and contained areas of puddling and gas. Fluoroscopic study of the diaphragm showed elevation of the right hemidiaphragm, but there was no evi-

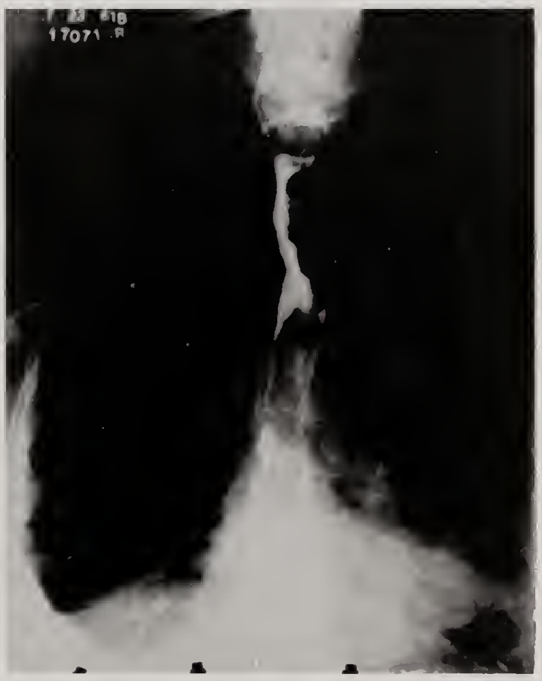


FIG. 1. Case 1. Barium swallow showing widening of esophagus. Note also puddling of barium in the vallecula.

dence of impaired movement of either the right or left sides. Laryngoscopy and pharyngoscopy revealed no evidence of foreign bodies or unusual growths. The vocal cords opposed each other in the midline. Esophagoscopy revealed smooth mucosa with no evidence of ulceration, tumor, or foreign body.

Shortly after transfer to the neurology service a saline infusion given as part of an endocrine study resulted in severe dyspnea. Cardiac evaluation revealed the presence of a gallop rhythm together with rales over both lung bases. These findings together with a history of paroxysmal dyspnea, ankle edema, a heart size at the upper limits of normal, widened QRS-T angle with a vertical axis indicated the presence of cardiac disease with borderline left ventricular decompensation most probably due to myotonia dystrophica. Following a period of slow oral digitalization and moderate salt restriction the patient's pulmonary and cardiac manifestations cleared up. The ankle edema subsided and there were no further episodes of dyspnea. Due to the persistence of the swallowing difficulty fluoroscopy with barium swallow was performed twice more, revealing definite lack of peristalsis of the esophagus below the level of T-2 together with definite widening of the entire esophagus (figure 2). With the patient placed in the prone position no contrast medium was observed in the lower eight-tenths of the esophagus on either the ½- or 1-minute film. The 5-minute film revealed flecks of barium coating the mucosa of the esophagus with the presence of the contrast material noted within the stomach viscus. No definite evidence of hiatal hernia was demonstrated. The X-ray impression consisted of definite widening of the entire esophagus with loss of peristalsis below the level of T-2 and incomplete swallowing with coating of the esophagus. Esophageal motility studies were subsequently scheduled, but the patient refused to allow the procedure to be performed. There was no significant change in the neurologic manifestations during the period of hospitalization except for some improvement in muscle power in the hands. The patient was discharged on June 27, 1961.

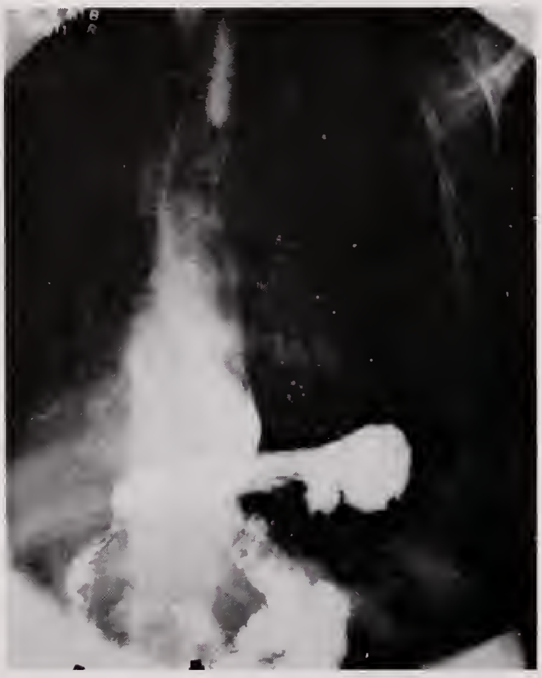


FIG. 2. Case 1. Barium swallow showing widening of the esophagus throughout its entire length and diminished peristalsis.

Case 2. The brother of patient 1 is a 39-year-old railroad section hand who was admitted to the Veterans Hospital, Togus, Maine, on July 18, 1960. He was described as having been in good health until about 1950, when he began to notice clumsiness and weakness in the lower extremities to the point where he was falling a good deal. In spite of this he continued to work until he was laid off in 1959. During the preceding five or six years his appetite increased to the point where he gained about 100 pounds in weight. His legs began to swell in 1956 and the edema persisted for a two-year period. In recent weeks he had become progressively more dyspneic and orthopneic, and for two weeks the dyspnea had become so acute that he was unable to lie down and had been spending all of his time sitting up in a chair. There was no past history of hypertension and no family history of obesity or endocrine disease. There was no history of difficulty in swallowing.

The patient was tremendously obese, short and stocky, weighing 256 pounds. The blood pressure was 130/88 and the pulse rate 72. The breasts were very obese. The lungs were clear and the heart sounds distant. There was four-plus edema of the feet and lower legs. He was acutely orthopneic and would become cyanotic and acutely dyspneic if he attempted to lie down in bed. The abdomen was very obese. No organs were palpable. The patient was oriented as to place and time. The fundi were negative. Premature baldness was prominent. There was wasting and weakness of the facial muscles including the masseters together with shoulder girdle atrophy. The metacarpals were short, giving the hands a rather shortened appearance. There was definite testicular atrophy. Cataracts were not evident on the ophthalmoscopic examination, but a slit-lamp examination was not performed. There was no evidence of a myotonic response in either the thenar areas or the tongue.

Laboratory studies including complete blood count, urinalysis, electrolytes, serology, blood urea nitrogen and thymol turbidity were within normal limits. The cephalin flocculation was 1+. The total protein was 8.3 Gm., albumin, 4.3 Gm. and globulin, 4.0 Gm. The 17-ketosteroid excretion was 15 mg. in 24 hours and the 17-hydroxycorticoid 12.9 mg. in 24 hours. This was interpreted as normal 17-ketosteroid excretion and slightly high 17-hydroxycorticoid excretion. The chest X-ray film revealed enlargement of the heart shadow and congestion of major pulmonary vessels. There was minimal pleural effusion on the left side. Manifestations were primarily those of congestive failure. A later X-ray of the chest still showed cardiac enlargement. There was no evidence of pulmonary consolidation or pleural reaction. The hydrothorax had disappeared. X-ray films of the skull were negative. An electrocardiogram was interpreted as probably within normal limits with right axis deviation and clockwise rotation.

The patient responded to therapy for cardiac failure with digitalization and diuretics and a program of weight loss. In January 1961 he developed evidence of early bronchopneumonia in the left lower lobe and was treated with novobiocin with a prompt response. Following recovery from this infection he was permitted convalescent leave and subsequently discharged from the hospital on May 4, 1961 after slightly less than a nine-month period of hospitalization. The discharge diagnoses consisted of (1) hypertension of the lesser circulation due to severe obesity and dystrophic heart disease, cardiac enlargement, cardiac failure and myocardial damage, and (2) myotonia dystrophica.

Discussion

Cardiac manifestations of myotonia dystrophica are being reported with increasing frequency. These manifestations are usually in the form of electrocardiographic abnormalities of conduction. Cardiac abnormalities due to myotonia dystrophica in members of the same family are infrequent. Cardiomegaly or evidence of congestive heart failure has rarely been reported as a complication of myotonia dystrophica. In a report of 13 cases of myotonia Evans[28] described two patients with breathlessness and cardiomegaly and several with low pulse pressures, but most authors have been impressed with the nonspecificity of the physical findings with regard to the heart and circulatory system. The occurrence of cardiac involvement in the form of left ventricular failure in two siblings, although highly unusual in myotonia, does indicate that the heart muscle itself can participate in the dystrophic process and be involved along with other involuntary musculature.

Previous studies have indicated that when cardiac abnormalities occur in myotonia the neuromuscular manifestations of the disease are usually well established. In both the patient and his brother advanced manifestations of myotonia were present prior to the development of cardiac manifestations. However, there is a report of a case in which severe heart involvement in the form of atrioventricular dissociation with Stokes-Adams attacks antedated any obvious neuromuscular involvement.[29] This supports the impression that myotonia dystrophica is a generalized disease and may affect the involuntary muscles of the heart, blood vessels, skin, respiratory, alimentary, endocrine and reproductive systems.[30]

Esophageal involvement has been described by some authors as occurring quite commonly in myotonia. However, the true incidence is difficult to determine since patients frequently do not spontaneously complain of swallowing difficulty. In addition, studies such as esophagoscopy, fluoroscopy, and motility studies are seldom carried out on myotonic patients unless the complaint of difficulty in swallowing is quite severe and a lesion other than myotonia is suspected. It is most unusual for a myotonic patient to be admitted to a hospital with a complaint of difficulty in swallowing. Fortunately, our patient focused attention on the swallowing difficulty on admission to the hospital, and this complaint together with a suspicious chest X-ray film led to esophageal studies. It is highly probable that the performing of fluoroscopic contrast study of the esophagus in myotonic patients with minimal complaints of swallowing difficulty would reveal a much higher incidence of esophageal involvement.

Reports of previous esophageal studies other than the cases reported by Albrecht have indicated that the upper third of the esophagus, which is made up of striated musculature, was involved. The fluoroscopic contrast studies in our case revealed dilatation of the entire esophagus, indicating that the smooth muscle of the lower portion of the esophagus was involved in addition to the striated musculature of the upper esophagus. This appears to be in keeping with previous evidence indicating smooth muscle involvement.

The initial study of Caughey and Gray in which they reported three patients out of 25 with myotonia dystrophica in whom the diaphragm was elevated on one side indicates that diaphragmatic involvement is not uncommon in this disease. The recent report of two additional cases by the same author suggests that the more frequent fluoroscopic study of the diaphragm in cases of myotonia dystrophica would reveal a much higher incidence of involvement of the diaphragm. Although the fluoroscopic study in our patient revealed elevation of the right hemidiaphragm, there was no evidence of impaired movement of either the right or left sides. Despite the normal range of movement there is a strong possibility that the elevated right hemidiaphragm represents early involvement by the dystrophic process. Follow-up studies may indicate whether or not this assumption is correct. It is noteworthy that it was Caughey's impression that when the diaphragm is involved in the dystrophic process it is usually involved late in the disease.

The question of whether the involuntary musculature is primarily involved in the dystrophic process or whether it is secondary to autonomic nervous system involvement has been previously considered by other authors. Albrecht in a study of myotonia dystrophica described four cases with involvement of the esophageal musculature. He concluded as a result of his study that myotonia dystrophica was not limited to the voluntary musculature but also involved the involuntary muscles. Keschner and Davison[31] stated that a review of the clinical and pathologic reports seemed to indicate that the muscles were primarily involved in myotonia dystrophica. It was their impression that the finding of changes in the sympathetic ganglion cells in only two cases (Weil and Keschner and case 1 of the authors) did not justify the conclusions of Curschmann, Bramwell and others that the dystrophies in general might be due to a disorder of the sympathetic nervous system. It was also their belief that changes in the anterior horn cells were the result of retrograde degeneration secondary to degeneration of the muscle. Maas and Paterson in a review of the literature and their own observations on the subject of involuntary muscle involvement in myotonia dystrophica concluded that the muscles of the heart, blood vessels, skin, and the respiratory and alimentary systems, as well as the pupillary muscles and those of the genital tract are frequently affected in myotonia dystrophica. They indicated that there was insufficient evidence to decide whether the muscles were primarily involved or whether their involvement was secondary to autonomic nervous system pathology. It was indicated that several authors. Foix and Nicolesco, Weil and Keschner, and Keschner and Davison had described histologic changes in the autonomic nervous system. However, Bielchowsky[32] on microscopic examination of one of Maas and Paterson's cases observed only relatively slight degenerative changes in the autonomic centers of the brain and spinal cord and indicated that they were not related to the severe changes in the muscles and endocrine glands.

Resolution of the problem is not possible at the present time due to the lack of histologic confirmation of clinical impressions. Reports of autopsy studies of cases of myotonia dystrophica in the literature are uncommon. Even more infrequent are detailed neuropathologic studies with particular emphasis on the autonomic nervous system. There is a need for more detailed pathologic studies including the heart, esophagus, diaphragm, small blood vessels, and the large and small bowel in order to obtain sufficient microscopic evidence to support clinical impressions relative to involvement of the involuntary musculature in myotonia dystrophica. In addition there is a need for histologic studies of the autonomic nervous system in order to determine whether or not autonomic nervous system lesions occur in this condition.

Summary and Conclusions

The cardiac, esophageal and diaphragmatic manifestations of myotonia dystrophica have been described. Esophageal and diaphragmatic involvement are considered to be uncommon, but this may be due to the infrequent use of fluoroscopic contrast studies in these cases. Cardiac abnormalities other than conduction delay or arrhythmia have rarely been reported. Cardiac abnormalities in members of the same family are even more infrequent.

Case reports of a patient with myotonia dystrophica who showed evidence of congestive failure and esophageal involvement and a sibling with myotonia and congestive failure have been presented. The occurrence of cardiac involvement in the form of left ventricular failure in two siblings indicates that the heart muscle can participate in the dystrophic process.

Involvement of the heart, esophagus and diaphragm represents additional evidence that the involuntary as well as the voluntary musculature is affected in myotonia dystrophica. Present evidence points to the muscles as being the primary site of involvement rather than the autonomic nervous system. There is a need for additional histologic studies of the heart, esophagus, diaphragm, small blood vessels, and the large and small bowel in order to support clinical impressions concerning involuntary muscle involvement in myotonia dystrophica. Histologic studies of the autonomic nervous system are also needed to determine whether the autonomic centers are affected in this condition.

Acknowledgment: We wish to express our appreciation to Dr. Francis A. Spellman and the Medical Department of the Veterans Administration Hospital, Togus, Maine, for permission to use case report no. 2.

REFERENCES

1. Curschmann, H.: Deutsche Ztschr. f. Nervenh., 1912, **45**, 161.
2. Hauptmann, A.: Ibid., 1916, **53**, 55.
3. Rohrer, K.: Ibid., 1916, **55**, 242.
4. Kroh, H.: Berl. klin. Wchnschr., 1898, **35**, 417.
5. Stiefler, G.: J. f. Psychol. u. Neurol., 1915, **35**, 173.
6. Fleischer, B.: Arch. Ophthal. (Chic.), 1918, **91**, 96.
7. Albrecht, W.: Arch. f. Laryngol. u. Rhinol., 1920, **33**, 145.
8. Hirschfield, R.: Zentralbl. f.d. ges. Neurol. u. Psychiat., 1911, **5**, 682.
9. Griffith, T. W.: Quart. J. Med., 1911, **5**, 229.
10. Adie, W. J., and Greenfield, J. G.: Brain, 1923, **46**, 73.
11. Ask-Upmark, E.: Acta Med. Scand., 1944, **116**, 502.
12. Biork, G.: Nord. Med., 1944, **21**, 946.
13. Thaysen, E. H.: Ugeskr. Laeg., 1943, **105**, 329.
14. Fisch, C.: Amer. Heart J., 1951, **41**, 525.
15. Dewind, L. T., and Jones, R. J.: J.A.M.A., 1950, **144**, 299.
16. Black, W. C., and Ravin, A.: Arch. Path. (Chic.), 1947, **44**, 176.
17. Steinert, H.: Deutsche Ztschr. f. Nervenh., 1909, **37**, 38.
18. Thomasen, E.: Myotonia. Copenhagen: Munksgaard, 1948.
19. Terrien, F., Sainton, P., and Veil, P.: Bull. Soc. d'opht. de Paris, 1929, **46**, 91.
20. Lamby, H.: Wurzburg Dissertation. Berlin: W. Schulz, 1931, p. 17.
21. d'Antona, L.: Minerva Med., 1935, **1**, 833.
22. Rouquès, L.: La myotonie atrophique. Paris: LeGrand, 1931, p. 40.
23. Sekiya, M.: Orient. J. Dis. Infants, 1940, **28**, 8.
24. Caughey, J. E., and Gray, W. G.: Thorax, 1954, **9**, 67.
25. Bashour, F., Winchell, P., and Reddington, J.: New Engl. J. Med., 1955, **252**, 768.
26. Benaim, S., and Worster-Drought, C.: Med. Illus., 1954, **8**, 221.
27. Caughey, J. E., and Pachomov, N.: J. Neurol. Neurosurg. Psychiat., 1959, **22**, 311.
28. Evans, W.: Brit. Heart J., 1944, **6**, 41.
29. Litchfield, W. C.: Ibid., 1953, **15**, 357.
30. Maas, O., and Paterson, A. S.: Monatschr. f. Psychiat. u. Neurol., 1947, **113**, 79.
31. Keschner, M., and Davison, C.: Arch. Neurol. & Psychiat., 1933, **30**, 1259.
32. Bielchowsky, M., Maas, O., and Ostertag, B.: Uber dystrophia myotonica. Bucarest: Marinesco, 1933, p. 71.

Labor and Delivery Complicated by Dermoid Cysts*

Report of Two Cases

ANNA M. L. VAN ROOY, M.D.
ALBERT I. ROBINS, M.D.
Washington

THE DERMOID CYST is a benign cystic neoplasm composed of well differentiated, predominantly ectodermal structures, although some mesodermal and occasional endodermal derivatives may be found. It comprises about 10 to 20 per cent of ovarian tumors. A dermoid cyst may be microscopic in size or may reach proportions up to 40 cm. In 25 per cent bilateral involvement occurs. The tumors are usually round or oval, doughy and rather heavy, with a smooth, opaque, gray-white or yellow surface. The open specimen can reveal fatty, sebaceous material, strands of long hair (no relation to the color of the host), mostly originating in a skin-lined area. Cartilage, bone and teeth are found in two-thirds of the cases. Organoid structures such as parts of extremities, etc., have been described. Histologically, almost any well differentiated tissue of ectodermal, mesodermal or endodermal origin may be found. A one-sided development of specific tissues may give rise to a struma ovarii, pseudomucinous cyst, fibroma, chondrofibroma or osteofibroma. Malignant transformation may occur in approximately 3 per cent of the cases, with an incidence of squamous cell carcinoma in about 1.7 per cent. Clinically, dermoid cysts may be asymptomatic or associated with lower abdominal pain, abdominal enlargement or pressure symptoms. A position anterior to the uterus is common. Roentgenographic demonstration of teeth is pathognomonic. Another help is the localization of encapsulated fat, which is radiolucent. Since dermoids are almost always pedunculated, torsion is common (14 per cent).[1] Leakage or rupture (1.3 per cent) can give rise to an irritative, chemical peritonitis causing dense adhesions and even death.[2] Secondary infection is rare. Therapy includes excision or oöphorectomy. Because of the frequent bilateral involvement, the other ovary should always be carefully inspected, and bisection with local excision may often be necessary. Dermoids may be multiple in a single ovary.

Ovarian cystic enlargement of any degree, with the possibility of enlargement during pregnancy, occurs once in every 81 (or 1.2 per cent) of pregnancies according to Grimes.[3] If, however, the cysts are sufficiently large to constitute a definite hazard in pregnancy, the incidence is reduced to 1 in 328. According to the same authors, 22.5 per cent of these tumors in pregnancy were diagnosed by the pathologists as dermoids, approximately 1:1,400. Out of a series of 107 cases collected by McKerron,[4] 46 tumors (43 per cent) were dermoid cysts, while Spencer[5] observed dermoid cysts in 12 of his 41 (29 per cent) patients, and Child and Douglas[6] in seven of their series of 23 patients (30 per cent). Rogge, at the University Clinic for Women in Berlin (Germany) found that out of 29,212 deliveries, 0.2 per cent had ovarian tumors, of which 31 per cent were dermoids.[7]

---

* From the Columbia Hospital for Women, Washington, D. C.

Probst, in the University Clinic for Women in Tubinger (Germany), found 28 cases (0.9 per cent) of ovarian tumors in 33,720 deliveries, of which 45 per cent were dermoids.[7] Oettle, in 1953, examined the world literature and found only 50 cases of bilateral ovarian tumors in pregnancy.[8] In 1960 Ottolenghi-Preti[9] reviewed the world literature and found that he had the ninety-first and ninety-second cases of bilateral dermoid tumors complicating pregnancy. Both were operated on early in pregnancy. Most women go to term without any knowledge of the tumor. If the tumor is detected early in pregnancy, most obstetricians will favor removing the tumor during pregnancy if the cyst is more than 6 cm. in size. One of the most feared complications is torsion of the cyst with subsequent hemorrhage, gangrene and infection. The optimum time for removal is early in the fourth month when nausea and vomiting have subsided, when the placenta has developed sufficiently to take over the production of progesterone, and when the size of the uterus at that time does not require undue manipulation nor add any difficulty in the removal of the cyst.[10]

According to Grimes and co-workers[3] and Patton,[11] the incidence of abortion following the operation is apparently not increased as compared to the expectant treatment. If the dermoid cyst is not detected until the third trimester, expectant treatment is usually followed. Indications for immediate operation (Greenhill[12]) are suspicion of malignancy, torsion or signs of infection of the tumor, and overdistention of the abdomen.

During labor vaginal delivery is usually possible unless the cyst is blocking the pelvis and does not permit the descent of the presenting part. Failure of the presenting part to engage when the pelvis is known to be normal suggests an obstructing mass and cesarean section is indicated, followed by the removal of the tumor. Two such cases occurred at Columbia Hospital for Women in Washington, D. C., since March, 1960, one of which was bilateral.

REPORT OF CASES

Case 1. G. S., a 19-year-old primigravida, with the expected date of confinement March 15, 1960, was first seen in the office on October 8, 1959, and found to have a soft cystic mass about 5 by 8 cm. in the cul-de-sac. Because of the age of the patient it was decided to reëvaluate the cyst at a later date.

On February 11, 1960, at about 35 weeks' gestation, the office examination failed to disclose the cyst in the cul-de-sac. The patient started into mild labor on March 6, 1960 and was admitted to the hospital with five-minute contractions. She was found to have a vertex presentation with the presenting part floating. A cystic mass was felt in the cul-de-sac, blocking the birth canal. X-ray pelvimetry revealed an adequate pelvis; evidence of a dermoid tumor was not noted. After 12 hours of mild labor without any progress a low cervical cesarean section was performed for dystocia due to a large cystic mass blocking the birth canal. After a 6 lb. baby was delivered and the uterine incision closed, examination revealed a right ovarian cyst measuring 13 by 10.8 by 6.5 cm. prolapsed in the cul-de-sac. After the left ovary was inspected and appeared to be normal a right oöphorectomy was performed. The cyst contained large amounts of sebaceous, fatty material, and hair. No calcifications were seen. The patient had an uneventful postoperative course and left the hospital on her seventh postoperative day. Pelvic examinations performed on April 21, 1960 and September 15, 1960 were normal.

Case 2. C. D., a 19-year-old colored primigravida, was first seen in the prenatal clinic on October 12, 1961. On December 4, 1961, at 36 weeks' gestation, she was admitted to the hospital with a history of ruptured membranes for 24 hours and mild irregular contractions. Examination revealed a term-size uterus with the fetus in a vertex position. The head was unengaged. The cervix was closed and uneffaced. No other abnormalities were noted at that time. The next morning (December 5, 1961) pelvimetry was reported as adequate. Calcifications were noted, but that they might be within dermoid tumors of the ovaries was not appreciated (figures 1 and 2). Because of ruptured membranes for 48 hours, an intravenous Pitocin® drip (1:2,500) was started. After five hours of good 2- to 3-minute contractions no progress was made. On rectal examination a large cystic mass in the cul-de-sac was felt, which was approximately 8 by 6 by 6 cm. and apparently compressed by the presenting part. A low cervical cesarean section for mechanical obstruction was then performed and a 6 lb. baby delivered. Bilateral ovarian cysts were found to be present. The right one measured 10 by 10 by 12 cm. and was

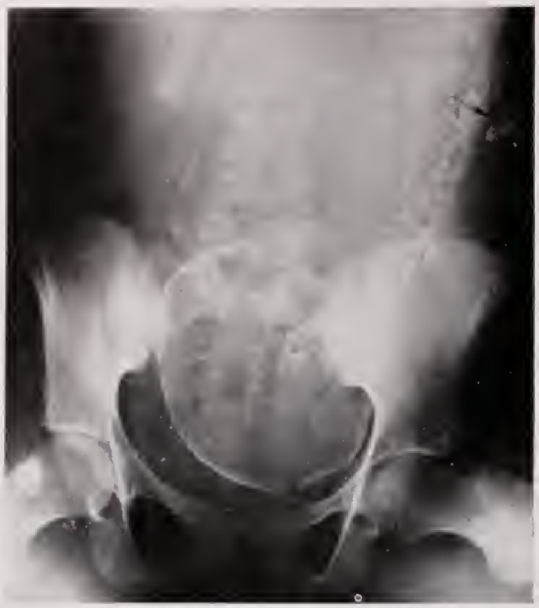


FIG. 1. Mottled calcification above right iliac crest within dermoid tumor of ovary.

impacted in the cul-de-sac behind the uterus, and on the left side, high up out of the pelvis, a similar 5 by 5 by 4 cm. cyst was present with the same appearance; both tumors were grayish white and doughy with a smooth opaque surface. An attempt was made to excise the right ovarian cyst, but this cyst, containing large amounts of sebaceous material and hair, involved the complete ovary. Therefore, a right oöphorectomy had to be performed. On the left side a very small remnant of ovarian tissue could be preserved and a similar cyst was removed containing sebaceous material, hair, and calcium deposits. These cysts were noted on the X-ray films taken for pelvimetry, as shown in figures 1 and 2. The patient had an uneventful postoperative course and was discharged on the seventh postoperative day.

On her six weeks' postpartum checkup the pelvis was normal but the patient had not yet menstruated. One week later, seven weeks postoperatively, the patient had a normal menstrual period.

SUMMARY

Two patients with dermoid cysts complicating pregnancy resulting in cesarean sections have been presented. One patient had bilateral dermoids. This represents the ninety-third case to be reported.

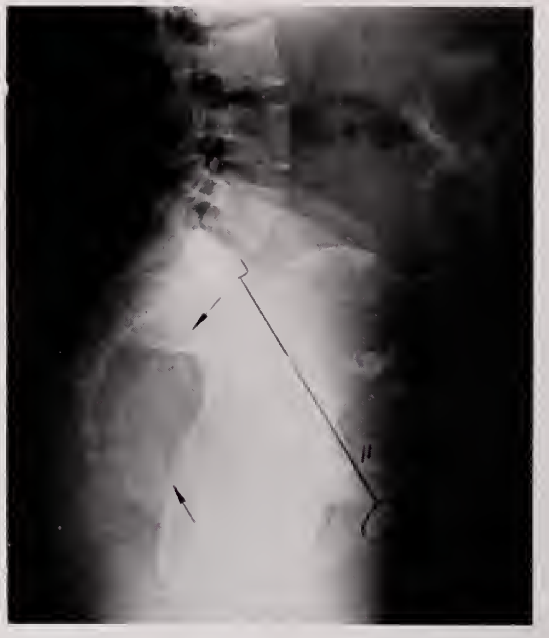


FIG. 2. In lateral projection calcium localizes dermoid in right ovary in cul-de-sac. Top arrow points to calcium; bottom arrow localizes lower extension of soft tissue mass.

REFERENCES

1. Stech, D.: Zbl. Gynaek., 1961, **83,** 49.
2. Taylor, C. P.: Obstet. Gynec. (N.Y.), 1959, **14,** 523.
3. Grimes, W. H., Jr., and others: Amer. J. Obstet. Gynec., 1954, **68,** 594.
4. McKerron, R. G.: Pregnancy, Labor and Childbirth with Ovarian Tumors. London: Rebina, 1903.
5. Spencer, H. R.: Surg. Gynec. Obstet., 1909, **8,** 461.
6. Child and Douglas, cited by Eastman, N.J.: Williams Obstetrics, 10th ed. New York: Appleton, 1950, p. 933.
7. Haller, J.: Zbl. Gynaek., 1960, **82,** 1353.
8. Kraetzig, W.: Ibid., 1960, **82,** 1822.
9. Ottolenghi-Preti, G. F.: Quad. Clin. Ostet. Ginec., 1960, **15,** 162.
10. Te Linde, R. W.: Textbook of Operative Gynecology, 3rd ed. Philadelphia: Lippincott, 1962, p. 683.
11. Patton, D. L.: Surg. Gynec. Obstet., 1906, **3,** 413.
12. Greenhili, J. P.: Obstetrics. Philadelphia: Saunders, 1960, p. 613

Food Allergy—A Practical Approach*

ELLIS APRIL, M.D.

Head of the Allergy Department, Washington (D. C.) Hospital Center; Assistant Professor of Clinical Medicine, Georgetown University School of Medicine

WHAT IS ONE MAN'S FOOD is another man's poison." This was said over 3,000 years ago and was the first recognition of what we classify today as "food allergy." There was no idea of the mechanism of this phenomenon then, and today there is no clinical entity subjected to so much misconception, ignorance, fad, and pure superstition.

There is too much loose thinking by patients and physicians alike. Such terms as "intolerance," "disagreements," or "idiosyncrasies" are used indiscriminately to describe nonspecific responses to ingredients inherent in foods. These responses may occur in anyone whose constitutional make-up renders him susceptible to these ingredients, but they are not antigen-antibody reactions and therefore do not fulfill the criteria for allergy. For example, a patient may state, "All fatty foods bloat me." An individual may be allergic to a specific food that contains fat, such as pork, butter, egg, but it is unlikely that he is allergic to all the various foods containing fat. Such an individual should have a gallbladder study.

A patient may state that all raw fruits and vegetables are indigestible. In this case the physician should look for colitis due to something other than allergy, because the symptoms are not associated with a specific fruit or vegetable. Frequently, we hear patients state that "all acid foods" such as tomatoes, oranges, strawberries, and pineapple cause them to itch and break out. These food items are not "acid." They are not allergenically related, and therefore the probability that each of these items is an offender is remote, and one had better suspect something other than a food as the cause of the complaint. Alcoholic drinks are often labeled as allergenic offenders. But in a true allergy it is the specific source of the alcohol that offends—the grains in distilled whiskey, fruit in the wine or brandy, or malts and hops or grains in beer. When alcohol is responsible for clinical symptoms the symptoms are usually due to an exaggerated physiologic response and not an allergy.

Likewise, many other clinical symptoms—fatigue, restlessness, insomnia—are attributed to a food allergy. Individuals who have complaints of this nature usually require a good medical workup, sometimes even a psychiatric evaluation.

Symptoms usually associated with allergy (itching, sneezing, coughing, headache, abdominal distress) can be due to factors other than allergy, such as infection and endocrine or emotional disorders. Chronic urticaria is seldom due to a food allergy.

It does not belittle our present knowledge of allergy to admit, as we should, that relatively little is known of the fundamentals of the allergic reaction; but there are certain facts that are known, even though much that passes for knowledge is speculative.

Allergy is a sensitivity which some people develop to substances which are ordinarily harm-less to other people. Reactions are varied; minute amounts of irritants can often cause explosive reactions. All reactions are characterized by smooth muscle spasm, edema, or hypersecretion of mucous glands, and usually are relieved by epinephrine, ephedrine, antihistamines, and steroids. Because the offending substances can affect any and every organ and tissue cell, a discussion of allergic reactions to foods is not limited to the gastrointestinal tract but includes all systems.

---

* Presented at the Annual Convention of the Southern Homeopathic Medical Association in Washington, D. C., October 29, 1961.

The offending agent in food allergy is the protein fraction. The food involved is usually one that is relatively uncooked or containing heat-stabile proteins. Therefore, milk, egg, fish and shellfish stand high on the list of offending agents. The offending food can be ingested, inhaled (the odor of some foods cooking—fish or egg, for example, can cause violent asthma in highly susceptible patients), contacted (dermatitis after handling fruits or vegetables), and even can be injected (allergic symptoms may result in egg-sensitive individuals who are given prophylactic injections of vaccines for influenza, typhus, and mumps which are prepared in the chick embryo). Therefore, it is not only important to check the contents of injectable materials but the possibility of the patient's sensitivity to it.

There is still a great diversity of opinion among allergists concerning the relative frequency of food allergies. One school places great emphasis; the other, to which I belong, believes they are highly important in the individual case but as a whole are relatively uncommon. The general interest in diets as such, the tendency to attribute to the ingestion of food all manner of complaints, the vast majority of which are not allergic, and the deep impression made by the occasional instance of the sudden dramatic symptom following the eating of a particular food all combine to give undue consequence to so-called food allergy. Consider the instances of coronary attacks that have been labeled "indigestion" and that not too long ago a ruptured appendix was associated with the eating of green apples.

Food allergies do occur in every age group, but the greatest incidence is in infants, since the membranes of the stomach in infants are "immunologically immature." Some colics are directly attributable to food allergy.

In the diagnosis of food allergy a careful history is the single most important feature, since it is not only valuable in ruling out other possible etiologies but it affords the best method of singling out the specific offending food.

Although the actual allergic manifestation is acquired, the predisposition to become allergic is inheritable. Consequently, the family history of any allergic manifestation is important. The personal history is significant in that rarely do we find isolated instances of one allergic manifestation. Therefore, if a patient has a close relative who suffers from a known allergy and has hay fever or asthma himself, his present complaint may be due to a food allergy as a manifestation of a general allergic condition. Food allergies are usually part of a predominantly inhalant allergy and it is not unusual to find symptoms from foods only when the patient is unduly exposed to an inhalant, as during a particular pollen season. The systems and social history will help to differentiate presenting symptoms from other conditions and give a better perspective in evaluating the cause of the complaint.

Physical examinations are not revealing in the specific diagnosis, because the signs of food allergies are reversible and therefore may not be present at the time of examination. Particular physical findings offer no clue to the specific type of the allergic offender, be it food, inhalant, or drug.

The only significant laboratory procedure in the diagnosis of food allergy is the estimation of eosinophiles. Eosinophiles occur in the blood, mucoid secretions, and in the tissues. A normal peripheral blood eosinophile count does not rule out an allergy. More than 3 per cent eosinophiles is considered significant. Allergic symptoms are often associated with 3 to 10 per cent eosinophilia; greater than 20 per cent raises the question of periarteritis, parasitic infestation, or Loeffler's eosinophilia syndrome. The presence of eosinophiles in nasal smears and sputum is indicative of allergy; when found in the mucus of stools it is usually indicative of an allergy due to a food.

An analysis of the gastric content may occasionally reveal hypochlorhydria.

Routine X-ray examinations are of no help in the diagnosis. Individual foods added to barium can be given by enema to confirm the diagnosis of a specific food offender.

Skin tests for foods are notoriously unreliable. As a procedure they are chiefly responsible for the low regard many clinicians have for the field of allergy. Neither positive nor negative tests are definitely significant. When patients react by skin tests they usually show multiple positive reactions, and when hundreds of food tests are done (unfortunately, many physicians still do them) and significance is attached to each positive reactor, extremely bizarre and limited diets are prescribed. Such diets readily lead to an undernourished and unhappy patient who usually becomes either uncoöperative or a "food neurotic." On the other hand, a negative skin test to a specific food does not mean that it can be ruled out as a possible offender. Many physicians still harbor this impression, thereby conveying to their patients a false sense of security regarding even a known food offender.

There has been considerable speculation as to the cause of the frequent absence of reactions in many types of food sensitivity. A few of the possibilities which enter into this complex problem will be briefly mentioned. The active principles of certain food allergens, especially among the fruits and vegetables, are unstable and rapidly become inert in test extracts. Therefore, some allergists test by scratching the juice of the raw fruit or vegetable on the skin. In some instances sensitivity to a split product rather than to a whole food may exist. Since the specificity of an antigen tends to change with its digestion, a test with an extract of a food in its natural state often fails to reveal sensitivity to derivatives of that allergen. There are, in addition, mechanical and technical factors such as ineffective methods of preparation and preservation of allergenic extracts or limitations in the testing techniques which may explain some of the inadequacies of testing with food allergens. Further, allergic skin tests are done on the skin and not at the site of the reaction. Therefore, when one evaluates the patient's history, the results of previously reported testing with foods should be disregarded. If skin tests with foods are done, only the more common foods like milk, egg, wheat should be used; the total should never be greater than about 15. A negative test, as mentioned, does not rule out any item. A strongly positive reaction may offer a clue as to which particular food to eliminate first in a trial diet or suggest more detailed questioning of the patient regarding that particular item, but it by no means signifies that the specific food offender has been definitely established.

In determining the offending food we must consider that there are basically two types of reactions to food, an immediate and a delayed. The immediate type, which is arbitrarily classified as that occurring within an hour, is usually due to the unaltered protein; symptoms are prompt and there is no question as to cause or effect. The offending food is therefore known by the patient and is not a diagnostic problem for the physician. A word of caution—do not skin-test a patient with any food (or for that matter any item) that he definitely knows is an offender. Not only is it a waste of time and effort, but it entails the risk of possibly causing a constitutional reaction.

The delayed type of reaction, that occurring after one hour and usually persisting, is in part explained as due to split products of ingested foods. These cases are the "tough ones." In isolating the specific food offender there are no fixed rules of procedure, but the method used must be systematic and detailed. Even though any food can cause any allergic symptom, the vast majority of food allergies are caused by a relatively few commonly eaten items. The foods less frequently eaten rarely cause allergic symptoms, and, when they do, they are usually recognized as such by the patient. Therefore, the food history is more than just, "Are you allergic to any foods?" Detailed questions must be asked about each specific common food: "Do you drink milk; if not, why not;" "do you eat eggs," etc. After previously saying he has "no food allergies, likes to eat everything," it is quite revealing to have the patient state when questioned specifically, "Oh, I never drink milk; it gives me diarrhea" or "chocolate gives me a headache" or "shellfish makes my throat itch and swell." When the history further reveals that a food has definitely been eliminated and no improvement in the patient's complaint has resulted, that particular food can certainly be ruled out as an offender.

In cases in which a food is suspected as the offending allergen, the patient is instructed to keep a log of the foods eaten—the time of ingestion and the time of the occurrence of symptoms. There must be some correlation between offending factors and clinical symptoms. As to the time lag between ingestion and symptoms, it varies with the degree of the patient's sensitivity; the amount of food, whether it is raw or cooked, eaten on an empty or full stomach; alcohol intake; physical or emotional state of the patient at that time. When a particular food is suspected as the offender, it is eliminated from the diet for about five days. If there is no change in the clinical condition during this time, the omitted food is then added to the diet and another suspected item is eliminated. Only one common food is eliminated at a time, thus causing no great hardship to the patient. If definite improvement occurs with the elimination of a food, the patient is urged later to do a provocative test, that is, to eat the suspected food on an empty stomach after it has been eliminated for five days. When the clinical symptoms are reproduced with this challenge, the offending food has then definitely been identified. This cycle of testing by omitting and adding a suspected food with positive results is the true clinical proof that food allergy exists. This provocative test is done only on patients whose symptoms are not alarming.

There are many varied elimination diets, ranging from a starvation diet with only intravenous fluids for three days and then the gradual addition of one food at a time to the elimination of all dairy products, cereals and fruits, or the limiting of the diet to only dairy products, cereals and fruits. These various elimination diets usually prove quite a burden to the patient in preparing recipes and keeping adequately nourished. Restrictive diets are unnatural and can readily lead to emotional troubles.

If the procedure of challenging the patients with the suspected food offender, after it has been eliminated for about five days, were used more often, there would be fewer people on wheat, egg and milk-free diets. It is not uncommon to see a child who is undernourished and irritable and whose mother is frantic because he has been on restrictive diets for prolonged periods with no improvement in his condition. It is gratifying to see the same child thrive and his mother relax when he is put on a full diet and the symptoms controlled by another approach.

Once the offending food has been determined, the next step is the treatment. Avoidance of the offender is, of course, the logical approach. This should not prove to be a hardship. When cow's milk is the offending factor, goat's milk or boiled milk can readily be substituted if the lactalbumin fraction of the milk is the offender. If the casein fraction of the milk is the offender, a soybean preparation can then be substituted. When citrus fruits are eliminated, vitamin C should be given as a supplement to the diet. When one cereal is eliminated, other cereals can be used more freely.

When a specific food is suspected, all items containing that food must be eliminated from the diet. When eggs are eliminated, it is necessary to remember that eggs are a constituent of many common items, such as mayonnaise, meringues, sauces, and even some of the better-grade ice creams. Wheat is found in most commercial rye breads. Corn is the source of Karo syrup and Mazola oil.

A knowledge of food proteins classified according to biologic relationship is important when eliminating an offending food, because biologically related foods also must be suspected. For example, peanuts are closely related to peas and string beans (legumes) but not to biologically unrelated almonds or walnuts. Almonds are related to plums, peaches, apricots, cherries. Walnuts are related to pecans. Wheat is not related to buckwheat. Chocolate is related to cola drinks. Tomatoes are in the same biologic group as potatoes; oranges are in the citrus family. The only relationship shell-fish has to other fish is that they both live in water. The detailed biologic relationship of food proteins is listed in any standard textbook of allergy. Fortunately, prepared products are usually labeled as to content, which proves helpful to the patient on an elimination diet.

In all cases requiring dieting, care must be taken to avoid protein, mineral and vitamin deficiency.

Further, just because a specific food has been established as the offender in a particular case, it does not mean that all patients with the same clinical manifestation should eliminate that specific food. Egg is not the offender in all cases of eczema, fish in all cases of hives, or chocolate in all cases of migraine.

Treatment by desensitization is uncalled for because it is not only ineffective but also dangerous; constitutional reactions readily occur. Oral therapy with drop-by-drop increases has never been proved to produce the tolerance attributed to it.

Dilute hydrochloric acid may be prescribed empirically or because of an existing hypochlorhydria. It is not uncommon to see previously labeled "ulcer patients" get relief from abdominal distress when given hydrochloric acid and taken off milk.

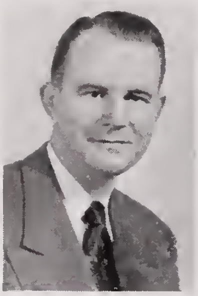
If the offending foods are avoided, nature unaided will provide a loss of sensitization in 90 to 95 per cent of the cases. The time required varies greatly. Arbitrarily at intervals of about three months the eliminated food is reintroduced into the diet. It is given at first in small amounts and must be well cooked, since cooking usually "denatures" the offending protein. This explains why many foods can be tolerated when cooked and not when eaten raw. Increasing amounts of the food are added as tolerated. Establishment of a food as an offender does not signify that that food necessarily has to be eliminated from the patient's diet for the remainder of his life. One man's poison may also become that man's food.

CONCLUSION

Food can be the offending allergen in allergic conditions, but it usually is not. Reliance should not be placed on allergic skin tests to determine specific food offenders, and patients should not be kept on restrictive diets without justification. This is in keeping with a precept of the art of medicine: "Do not make the treatment worse than the illness."

PRESIDENT'S PAGE

POLITICS AND MEDICINE



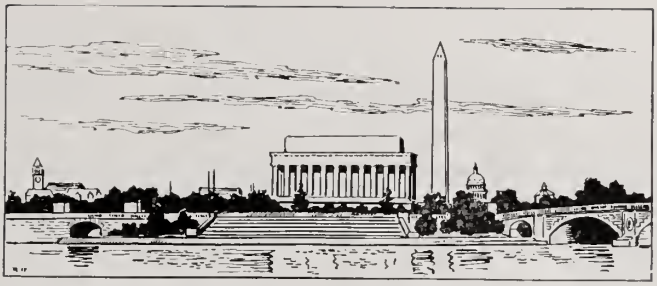
In the past it has been a tradition that the American physician confine his efforts to the care of the sick, leaving politics to the politician. Recent events on the political front have made it quite clear that a continuation of this policy will lead to an undermining of the very foundations on which the profession has been able to render the highest quantity and quality medical care known to any country in recorded history.

The physician is sworn, at all times, to render the best possible care to his patient, keeping only the best interests of his patient in mind in so doing, and to refrain from any action that is in conflict with this precept. With this thought in mind, how can the American physician be expected to stand idly by while a third party penetrates the personal relationship between the physician and his patient?

We have seen this occur in other countries not only to the extent that the patient has no choice of physician but the physician is limited in his choice of medications. We have observed the rapid decline in quality of medical care in these countries, the relocation of the great world centers of medical education from Europe to America, and the desperate flight of our foreign colleagues to escape this paralyzing atmosphere. In spite of all this, there are in this country politicians in office and aspiring to office who would have our patients believe that this is what they need in American medicine. Their approach is empirical—small doses are their technique—but we as physicians know that the cumulative effect of small doses can be fatal.

By maintaining silence on such a vital subject we would be negligent both as physicians and as citizens. We must express our beliefs in places where they will be effective or we will go down with our patients into a sea of paternalism and bureaucracy. Call it politics if you will, but we're in it whether we like it or not. Let us not forget that sometimes the most effective therapy is the least palatable.

J Spencer Dryden



EDITORIALS

The Cost of Hospitalization

The subject of the high cost of hospitalization to the individual and the community has been using much space in newspapers and magazines but no committee or organization has come up with a workable remedy to reduce it. If the problem is divided into the cost of the structure and the cost of its administration, it may be possible to approach it in an orderly manner, but not necessarily furnish a solution.

The cost of a hospital is often expressed as so much per bed. About 25 years ago it was possible to erect and furnish a modern hospital for $8,000 or $9,000 per bed. The cost today has skyrocketed to $30,000 or more per bed, depending on many factors. Hospital plans and construction have no counterpart in any other edifice for housing persons; office buildings, dwellings, schools and churches are simple in comparison. Special features are expensive to incorporate in the plans, and many building codes regulate the installation. As an example, nonexplosive electric switches, special floors in operating rooms to prevent sparking, separate rooms for anesthesia agents, stand-by electric systems for lighting in case of blowouts, specified cubic feet of air space for each patient, extra stairways, alarm systems, and numerous toilet facilities are only a few of the items that increase the initial costs. Most building codes visualize a hospital in which many helpless individuals are housed, and provisions are made for modern sanitation, prompt exit, and a minimum of accidents. Many hospitals include in their design outpatient examining and treatment rooms in many specialties, research laboratories, auditorium, class rooms, and quarters for a training school for nurses. Many of these facilities are not revenue-producing, and the maintenance is not cheap.

It is not difficult to understand why the original costs mount.

The equipment is an item out of all proportion to that of a hotel. One instrument alone for use in surgery of the ear costs about $2,000. Fifty to 100 thousand dollars can be spent on a good X-ray laboratory or pathology laboratory.

The prospect of reducing the cost of hospitals is very slim, indeed; even though the cost of building materials may be less in the future, it will be offset in the ever-increasing cost of labor. The construction of a hospital is governed by a stiff code which demands safety, comfort and accessibility measures which contribute to saving and prolonging human lives. The administration of a hospital, like any other business, can be economical or wasteful without sacrificing the welfare of the patient. Salaries are steadily advancing. In the procurement of food and supplies there is often an opportunity to save in timely buying or purchasing in quantity. If a

Opinions expressed in contributions to the Editorial Section are those of the writers and do not necessarily reflect the views of the Medical Society of the District of Columbia

competent administrator gathers a group of key employees and insists upon a war upon waste he may be able to effect a saving, but it will make only a small dent in the overall budget. It requires eternal vigilance to reduce waste and pilfering.

The high cost of medical care has been a favorite conversational topic for individuals, committees, and members of Congress, but the net result, in so far as reduction in cost is concerned, is practically nil. If these critics would familiarize themselves with the fundamentals, as an accountant or an auditor in the Internal Revenue Bureau would, much of their ammunition would be a dud. Many critics unfamiliar with hospital administration compare hospital costs with hotel prices. It is true they are about double, but the hotel room is occupied only about half the time, meals are not included, one does not tip for mail delivery or a pail of ice cubes, and the occupant does not get his back rubbed at night, as a rule. The public does not know that the hospital is prepared to offer services and equipment for illnesses and emergencies of all descriptions and at all times. Blood transfusions, oxygen administration, the use of the artificial kidney, the mechanics for certain heart operations run into many thousands of dollars annually and do not appear on each patient's bill but they are invisible expenses in which every patient bears a part.

It is true, I am sure, that many fringe benefits could be classed as extravagant and unnecessary, but patients are loath to give them up. Air-conditioning in each room is now considered a necessity; demand for television and radio is becoming vocal. There are areas in which economy is lightly regarded, and concerted action should be taken to check them in the interest of the public. The amazing amount, duplication, and cost of drugs which are prescribed are number one.

Forty years ago the going salary, if it may be so-called, was $10 monthly, or less, for an intern. Now it is $150 to $350, depending somewhat on the relative rank. Nursing authorities state that it costs a hospital about $6,000 for each nurse it graduates from its training school. Some institutions require the student nurses to share some of the expense, grouped under tuition.

The price of drugs has caused more adverse comment than any other item, but the sums spent for cosmetics, tobacco, and spirits are stupendous but receive little notice by the public. The layman has no conception of the expense involved in offering a prescription drug. Pharmaceutical houses employ a large corps of scientists, especially chemists and biochemists, to develop a remedy. Many of our valuable drugs, especially those of organic and animal extraction, have been duplicated in the laboratory by synthesis, thereby reducing the cost. Extracts from glands have been analyzed, the chemical formulae reconstructed, and the identical substances offered to the profession in abundance at reasonable prices. Each drug must be tested chemically, by animal administration or inoculation, and then clinically used with controlled checkup. Many drugs that do not pass the test are rejected, and the manufacturer sustains the loss. The very large salaries and bonuses paid the top executives of some drug corporations have been cited as adding to the cost of the product, but it should be pointed out that these same executives' compensations are subject to 70 to 90 per cent income tax.

Some patients are justified in questioning the laboratory bill. Many of the tests are necessary, but it cannot be denied that some seem to be ordered without a direct bearing on the nature of the illness. They seem to be more or less routine, but add to quite a bill, and should not be ordered if the doctor has any regard for the patient's pocketbook. Are we coming to the state when an IBM calculator is a part of the equipment on a hospital ward? Will we place in the machine a batch of reports of examinations, press a button, and receive a documented diagnosis in two seconds flat? What has become of our five special senses? I cannot see in the near or distant future any possibility of a substantial reduction in the cost of medical care, and this applies to hospitalization, drugs, nursing, and the doctor's bill, but rather a comprehensive 5 per cent increase annually. What we probably need is a pair of rose-colored glasses instead of the bifocals.

If one looks for a saving in the cost of a hospital and its administration sufficient to reduce materially the cost of hospitalization, he will receive little encouragement from available statistics. Patients demand conveniences and comforts. Solariums are a part of many institutions, equipped with radios and television to soften the impact of institutional life. One of my patients in a local hospital was advised to visit the solarium for a change of environment. A few days later I found her resting in her room and I asked her why she did not go up on the solarium. She said, "I went up yesterday and all I heard was that each patient had the best doctor, the best nurse, and the worst disease." Another patient whom I sent to New York for a lung operation some years ago told me of his solarium experience. While taking the sun one afternoon he sat near two patients and heard the following conversation: "When I first came here it was 45, then it went up to 60, then 70 and now it is 84." Another patient evidently heard the same statement and said to my patient, "What stock is he talking about?" The subject was anemia, and the hemoglobin record.

What benefits to the populace can be enumerated to justify the high cost of hospitalization? In the 62 years of this century the average duration of life has increased 20 years, due in great measure to the progress in medicine. There are over 60 million gainfully employed, probably averaging an income of not less than $4,000 annually, and this does not include those in the professions, arts and sciences. Four thousand dollars per year for the 20 extra years of life amounts to $80,000; multiply this by 60 million and we have an astronomical figure, almost equal to the national debt, and this does not include professional and self-employed individuals. There are over 16 million persons over 60 years of age, many of whom will require some type of hospitalization. We have begun to worry about an explosion of population, are dallying with laws to legalize abortions, and discussion of contraceptive methods is the topic at many gatherings. The reduction in mortality and the elimination of serious illnesses have been remarkable, due, without doubt, to medical research and the splendid faculties of modern hospitals.

Many diseases have become uncommon, such as tuberculosis, diphtheria, measles, infantile paralysis, typhoid fever, pneumonia and influenza, whereas not many decades ago they were nearly household words. The epidemic invasion of flu in 1918 has never been repeated. The maintenance of good health and the control of infectious diseases have been undertakings involving great expense in hospitalization, but it has been spread over a large population. Hospital insurance has softened the blow of the expense involved; although it has been abused by some, its good far outweighs the evil with which it has been infected.

We are in a period in which we must face up to many trying and burdensome situations, and probably the only outlet is to "grin and bear it."

C. S. W.

Objectives and Program of the AMA Committee on Nursing*

The program of the AMA Committee on Nursing is based on three general assumptions: (1) that nurses have a separate and distinct professional status and their contributions are those of co-workers; (2) that nursing should expect the medical profession to support and endorse high standards of nursing education and service; and (3) that each of the various levels of academic and technical accomplishment in nursing makes its own unique contribution to the total health care of the public.

On the basis of these broad assumptions, the Committee has adopted the following objectives:

1. To expand and strengthen liaison activities between organizations representing the medical and nursing professions at the national, state, and local levels.
2. To study and report to the medical profession on current practices and trends in nursing and on developments among nursing auxiliary personnel.
3. To stimulate, initiate, and, where feasible, support research in areas pertinent to the nurse-physician relationship in professional practice.
4. To offer advisory services to both professions on interprofessional matters.
5. To provide support and assistance to the nursing profession and its nonprofessional auxiliary personnel in their efforts to maintain high standards.
6. To encourage physicians to accept invitations to serve on nursing school faculties.

If the medical and nursing professions are to make the fullest use of their joint potential, they must have not only a common denominator of interest in the patient and a comparable body of knowledge, but also the kind of relationship that derives from a deeper appreciation of, and respect for, each other as allies working toward the same goals.

Arthur A. Kirchner, M.D., *Chairman*
Clarence H. Benage, M.D.
Elias S. Faison, M.D.
Benson W. Harer, M.D.
Charles L. Leedham, M.D.
William R. Willard, M.D.

---

* Reprinted from J.A.M.A., 1962, **181**, 430.

The Closed Chest Method of Cardiopulmonary Resuscitation*†

Benefits and Hazards

In view of the growing interest in the closed chest method of cardiopulmonary resuscitation, and the possible dangers in its indiscriminate use, the following statement has been prepared as a guide to the public regarding the present place of this new technique.

The closed chest method of cardiopulmonary resuscitation has been proved effective as a medical procedure in certain cases of stoppage or disruption of the heart beat. However, it is to be considered a temporary method, and additional medical treatment, which may include the use of drugs and an electric defibrillator, is usually required to restore the circulation permanently.

The heart beat may stop as a result of a variety of conditions or circumstances, such as water submersion, electrical shock, asphyxiation, heart attack, or during anesthesia or surgery. Most people who experience sudden stoppage or disruption of the heart beat (cardiac arrest) cannot be saved even under ideal circumstances in a hospital. The least measure of success has been experienced in coronary heart "attack" cases. However, the prompt use of cardiopulmonary resuscitation has enabled lives to be saved which previously might have been lost. The new technique of closed chest cardiac massage makes it possible to continue blood circulation without opening the chest, thus greatly extending the possibilities for attempting saving of life. Consequently, it is the desire of all concerned to achieve widespread use of this method where it can be used safely and effectively.

---

* An original statement on the closed chest method of cardiopulmonary resuscitation prepared by the American Heart Association has been revised to incorporate recommendations of an Ad Hoc Committee of the Industrial Medical Association appointed for this purpose. In its present form this statement is subscribed to by the Industrial Medical Association, the American Heart Association, and the American National Red Cross.

† Reprinted from J. Occup. Med , 1962, **4**, 492.

The public should be advised, however, that the application of closed chest cardiopulmonary resuscitation calls for a working diagnosis of the victim's condition. It is important to be sure that the circulation has actually stopped because the method involves certain hazards. Reported injuries to patients have included damage to the heart and liver, internal bleeding, multiple rib fractures, and puncture of the lungs. In untrained hands the risk of injury is increased. It is particularly important to avoid the possibility of inflicting serious injury on a person under the mistaken impression that cardiac arrest has occurred when the individual has simply fainted or lost consciousness from some other cause.

Successful application of closed chest cardiopulmonary resuscitation depends on thorough and careful training. One is most unlikely to be able to achieve artificial blood circulation by this method if his only training is from reading written instructions.

In view of these facts, it is suggested that closed chest cardiopulmonary resuscitation be applied *only by carefully trained personnel* so that it may be utilized with the greatest safety and effectiveness. Two qualified persons are preferable because it is necessary to maintain artificial respiration at the same time the heart is being massaged externally. A decision as to whether training in this procedure should be extended to certain segments of the general public must be postponed until further experience accumulates.

The organizations joining in this statement believe that emphasis should be placed at this time in training physicians, dentists, nurses and specially qualified emergency rescue personnel so that the procedure will become more widely available.

XII International Congress of Dermatology

The 12th International Congress of Dermatology, held at the Shoreham and the Sheraton-Park Hotels in Washington, D. C., on September 9 to 15, was attended by 2,300 members and 1,200 guests from over 50 countries.

In addition to the large and many-faceted program, which included case presentations at Walter Reed General Hospital, Johns Hopkins University Hospital and the Medical School of the University of Maryland, there were two outstanding innovations in medical communication.

The first of these consisted of color and sound films of case presentations from many parts of the world. These will form the nucleus of a central library of such films to be used for teaching.

The second, and without doubt most dramatic innovation, was the first medical program carried by Telstar. This also was the first live color Telstar presentation.

The program consisted of a presentation of seven psoriatic patients and discussion of these patients by a panel of British dermatologists who conversed also with their unseen three-man American panel (Dr. Donald M. Pillsbury, University of Pennsylvania, Philadelphia, President of the Congress; Dr. Clarence S. Livingood, Henry Ford Hospital, Detroit; and Dr. Rees B. Rees, University of California School of Medicine, Los Angeles) at Georgetown University Hospital.

The meeting was heralded as an outstanding scientific and social success.

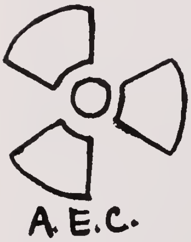
It is of special interest to the readers of the Medical Annals to note that a set of flags bearing the insignia of The International Congress of Dermatology was presented to the President of the Congress (for this and future Congresses) by the Washington Dermatological Society.

Naomi M. Kanof, M.D.
Assistant Secretary,
XII International Congress of Dermatology

COBALT-60

Cobalt-60 is a fairly recent addition to the armamentarium of the therapeutic radiologist. It compares favorably with the two million volt X-ray machine.

Its advantages compared to orthovoltages may be summarized:



1. **Skin sparing**—due to shorter wave length. The maximum ionization is 5 mm. below the skin surface; therefore, moist skin reactions are rare.
2. **Bone sparing**—there is much less absorption in bone with consequent less bone damage.
3. **Fewer hot spots**—the tissue adjacent to bone is not overtreated due to scattering.
4. **Greater penetration**—this is advantageous in deep-seated cancers in the chest or pelvis.
5. **Simpler arrangement of ports**—because of the foregoing, adequate doses may be delivered to deep-seated tumors through fewer skin areas, reducing error.

Disadvantages:

200,000 Volts

1. **Expensive**—primarily because of shielding.
2. Time of patient under machine increases with age of cobalt source, which must be replaced every five years.
3. Exit dose must be considered. The skin in this area may show more effect than at the point of entrance.
4. Where greatest absorption is desired in skin or bone, regular voltages are more effective.
5. Roentgen for roentgen there appears to be less biological effect. This requires an increase in tumor dose of about 15 per cent.

Cobalt-60 compliments regular voltages in therapeutic X-ray rather than supplanting them.

U
2,000,000 Volts

American Cancer Society

District of Columbia Division

810—18th Street, N.W.
Washington 6, D.C.
EXecutive 3-3690

RESEARCH
EDUCATION
SERVICE

A Report from India

The Second Asiatic Congress of Obstetrics and Gynecology

SAMUEL M. DODEK, M.D., F.A.C.O.G., F.A.C.S.

Administrative Chairman, Departments of Obstetrics and Gynecology, Washington (D.C.) Hospital Center; Associate Clinical Professor of Obstetrics and Gynecology, George Washington University School of Medicine

A NATION of 400 million people with 23 million either unemployed or underemployed, where 10 million babies are born every year, with simple iron and folic acid-deficiency anemia the commonest cause of maternal death, a country where advertisements appear regularly in the daily newspapers offering payment to men and women alike who present themselves to a hospital for surgical sterilization—this nation, the huge subcontinent of India, was host to a meeting of some 450 obstetricians and gynecologists. Their main topic was the improvement of maternal welfare and the survival of more infants.

Presided over by the renowned gynecologist, Dr. V. N. Shirodkar of Bombay, the Second Asiatic Congress of Obstetrics and Gynecology met in Calcutta in January.

The audience and participants were from eight Asiatic countries and seven non-Asiatic countries, extending from Australia to the U.S.S.R., and from the United States to West Germany, Sweden, the United Kingdom, Italy, Union of Arab Republics, Japan, Singapore, Hong Kong, Indonesia, Burma, Vietnam and India. These physicians represented more than 200 different languages and provincial dialects, but they were able to communicate with one another without interpreters or simultaneous translating equipment. English, which is not only the means of communication between the Asiatic countries but between Asia and the rest of the world, was the exclusive official language.

The large lecture hall of the All-India Institute of Public Health and Hygiene was filled to capacity on the opening morning. Colorful with the magnificent patterns of the saris of the very large number of women doctors, the audience listened to an inaugural address by The Honorable Dr. B. C. Roy, F.R.C.S. (Eng.),† Chief Minister of the State of Bengal. His words of welcome were warm as he praised the motive which voluntarily brought together physicians whose dedicated purpose was to improve maternal and child health and to exchange experiences and studies so that the world could be a healthier place to live in for all of the people. His voice was sterner as he admonished the listeners that physicians must come out of their narrow world and participate in the thinking and activities of the political atmosphere about them. His words carried authority, because not only is he himself a respected and capable physician and surgeon with more than 50 years in medicine in his native country, but he has been and is an important figure and candidate in Indian politics since the days before the independence of India 15 years ago.

Following Dr. Roy, Dr. Shirodkar gave his Presidential Address. He devoted most of his time to answering the critics of his recent book, "Contributions to Obstetrics and Gynecology," published by Livingstone of Edinburgh. He defended his operation for uterine prolapse during the child-bearing period, in which he either shortens the uterosacral ligaments through the vagina, or uses the abdominal approach in which he "slings up the uterus with either a fascial strip or Dacron tape to the promontory of the sacrum." One got the impression that the apparent importance which Indian women attach to the regular appearance of the menses and the influence of the north of England gynecologists were at the root of his enthusiasm for his operation and for the Fothergill in elderly women rather than the indicated vaginal hysterectomy and vaginal walls repair as carried out in the U.S.A.

The rest of the time the Congress was divided into three groups that met simultaneously in various rooms of the Institute. They discussed and presented some 85 papers on the same general topics: perinatal mortality, toxemia of pregnancy, cancer of the female genital tract, and miscellaneous papers and case reports.

Delegates from India delivered the majority of the papers. However, Dr. Hideo Yagi, of Japan, President of the First Asiatic Congress, held in Tokyo in 1957, introduced the topic of genital malignancy. He called for a coöperative study in all of Asia, stating that in Japan there were now 89 hospitals jointly studying uterine cancer. He compared the surgical management of carcinoma of the uterus in his department in the Okayama University Medical School for the years 1953 and 1954 with the results obtained by radiation therapy in the Radiumhemmet, Stockholm, from 1936 to 1953. Fifty-five and four-tenths per cent of the Japanese patients were treated by the so-called "Okabayashi operation," an abdominal extensive hysterectomy with pelvic lymphadenectomy. All pelvic nodes, even small nodes, are dissected completely en bloc. Eighty-seven and four-tenths per cent of the patients reported from Sweden were treated by radiation. The five-year cure rate was 48.9 per cent among 4,253 Japanese patients and 46.4 per cent among the 38,117 cases reported from Stockholm. Dr. Yagi said, "These comparative figures may be a subject of discussion on the treatment of cancer."

---

† Dr. Roy died in Calcutta in July at the age of 84.

Dr. Tow Siang Hwa, of the Department of Obstetrics and Gynecology of the University of Singapore School of Medicine, presented an enlightened and scientific study of the management of what he called the "Oriental disease," choriocarcinoma or malignant tumors of the trophoblast. He pointed out that one in 400 pregnant women in Singapore develops a hydatidiform mole and that 10 per cent are malignant. In his own institution, where 100 labor cases are managed every day (!), there have been 260 cases of mole and 30 cases of malignant tumors of the trophoblast in the past five years. All cases of choriocarcinoma are treated by him with Methotrexate®, and his results are comparable to those reported by Hertz of the U.S. National Institutes of Health. The two Japanese authors who presented papers on the same subject did not mention this treatment.

Sir John Peel of London was the guest speaker on a panel considering perinatal mortality.

Mr. Hector R. Maclennon, of Glasgow, led the discussion on maternal mortality. Reports from parts of India revealed that deaths from eclampsia had dropped to 3.8 per cent in the past five years as compared to a death rate of 19.0 per cent in the previous ten years. The failure of some 68 per cent of pregnant women to take any animal protein, and of more than half of them any dairy products, was offered as the reason why "anemia in pregnancy is the number one killer of Indian mothers at present." Hemoglobin values of 30 to 49 per cent are seen in the majority of the women, while 25 per cent have hemoglobin in the 15 to 29 per cent range.

Dr. Alan F. Guttmacher, of New York, shared the chairmanship with Sir John Peel in a round-table conference on the prognosis and management of diabetes in pregnancy, while Dr. Alan Rubin of Philadelphia was one of the chairmen in the discussion of toxemia of pregnancy.

During one of the sessions devoted to miscellaneous papers, chaired by Professor C. L. Mukherjee of Calcutta, I read the reports of research done in my institution, the Washington Hospital Center of Washington, D.C., on the use of the radioactive isotope Cr^{51} for the simultaneous localization of the placenta and the determination of maternal red-cell volume during or before the onset of labor.

Six extraordinary cases of bilharzial cancer of the bladder, where the size of the tumors prevented vaginal delivery, were reported by Dr. M. Karim, of Einshams University, Cairo, Egypt. Cesarean section was performed upon all six, but the two patients who were treated immediately by anterior exenteration and transplantation of the ureters into the colon are still alive, one and two years respectively after the operations. The other four died 12 days to two months after delivery. They were treated symptomatically and perished either from uremia or exhaustion caused by the fungating tumor. Dr. Karim pointed out that because of the low rate of lymph node metastasis (35 per cent) even in advanced cases, the rarity of distant metastasis in bilharzial bladder cancer as well as the radioresistant qualities of the tumor, "surgery, besides being curative, in some of the advanced cases of bilharzial tumor of the bladder definitely gives a symptomatic improvement in the less fortunate cases."

At a formal banquet of the Congress held in the Grand Hotel in Calcutta toasts were exchanged by representatives from the various nations, including a cabled greeting from Dr. Nicholson J. Eastman, President of the American College of Obstetricians and Gynecologists.

A spirit of genuine medical fraternalism pervaded the entire Congress during all of its sessions. Politics and nationalism faded before the purpose of the gathering—a healthier world for all the people.

The Third Asiatic Congress will meet in 1966, across the Pacific, in Manila.

Public Health Advisory Council

Dr. Daniel F. Lynch was reappointed a member of the Public Health Advisory Council by the D. C. Board of Commissioners for a three-year term on September 20, and at the regular meeting of the Council on September 25, was elected Chairman. Mrs. Dorothy E. Reese was elected Vice Chairman. The other members of the Council are Dr. John W. Lawlah and Mmes. William N. Buckner, Edward B. Morris, Richard C. Simonson, and Aliene C. Ewell. Dr. George Maksim was a member of the Council until September 15, when his term expired.

The Public Health Advisory Council was created in 1953 in the District of Columbia to increase citizen participation, lay and professional, in the Municipal Government's public health program, and to assist in an advisory capacity to the Commissioners and the Director of Public Health on public health matters. In general, the Council was formed to assist and advise the Commissioners and the Director of Public Health in the following respects:

1. Study and make appropriate recommendations concerning proposals for new policies and statutes or changes in existing policies or statutes affecting the public health program.
2. Advise on community health needs and desires and the formulation and execution of programs necessary to satisfy those needs and desires.
3. Advise and assist in coördinating the programs and activities of the Department of Public Health with those of community groups, associations, and professional organizations.
4. Interpret the activities of the Department of Public Health to the public.
5. Aid in stimulating public interest, understanding and participation of the community in solving public health problems.
6. Study community health needs and resources and assist in developing budgetary needs of the Department of Public Health.
7. Evaluate, upon request of the Board of Commissioners, the qualifications of candidates for the position of the Director of Public Health and make appropriate recommendations.
8. Study and evaluate the operations and activities of the Department of Public Health and make appropriate recommendations with respect to changes which may appear desirable.

The Council consists of nine members (residents of the District of Columbia for at least three years before appointment), appointed by the Board of Commissioners for a three-year term on the basis of personal qualifications. Nominations may be invited from the medical, dental, nursing, health engineering, and civic organizations of the community or the public at large. At least three, but not more than four, members shall be members of the professions cited. Members shall not be employees of the District of Columbia.

Since the Council was organized it has advised the Commissioners and the Director of Public Health in a number of significant ways. Some of the current year's activities were:

1. Recommended creation of a special Committee on Mental Health Needs and assisted the Commissioners in selection of its members.
2. Endorsed Health Department's plea for legislation to allow treatment of juveniles for venereal disease without parental consent.
3. Held its sixth annual public hearing on Health Department budget and heard testimony from 22 organizations and individuals. Supported Department's budget request at Commissioners' public hearings and before House Subcommittee on D. C. Appropriations.
4. Reëmphasized need for action on Central Core construction at D. C. General Hospital. This construction will consolidate the three main hospital buildings and ancillary services into a single unit.
5. Urged implementation of plans for earlier construction than now scheduled of a health center in the Far Northeast.
6. Resolved that birth control information should be made available in all Departmental maternity clinics.
7. Endorsed a proposal for reorganization of advisory councils.
8. Considered and took action on: neonatal mortality and newborn hospital care, infant formula procedures, treatment and follow-up of alcoholics, health education, dental health, tuberculosis control, and oral polio vaccination.
9. Members served on Commissioners' screening committee to select candidates for Director of Public Health, Howard University forums on medical care for indigent and aged, Emergency Ambulance Committee, Health and Welfare Council conference

groups, and Cancer Coördinating Committee. They represented the Council at Commissioners' hearings on practical nursing and at the D. C. Medical Society seminar on the older patient.

The Council would welcome the attendance of a representative from the D. C. Medical Society at any of its open meetings, which are held on the fourth Tuesday of each month, except during the summer, at 2:00 p.m., in Room 4138 of the Municipal Center Building. The Council also invites communications from Society members on any public health aspect of medicine in which it might aid and stimulate public interest and understanding.

The Executive Secretary of the Council is Miss Bronette Ehrlich. Her telephone number is National 8-6000, extension 2172.

"Continuing Care Program" at George Washington

NINETY-THREE JUNIOR MEDICAL STUDENTS of George Washington University School of Medicine have begun the new program, called "Continuing Care," which was described by Dr. Thomas M. Peery, Chairman of the Educational Policy Committee, in the September issue of the MEDICAL ANNALS. The program, a new type of preceptorship, is the first major step in the expanded program of medical education announced last spring by Dr. John Parks, Dean of the School of Medicine.

Briefly, the plan is as follows: In the third year of Medical School the Junior Class will be divided into three groups for instructional purposes. Each student will be assigned a patient in each of three fields, obstetrical, medical and surgical, the last two with some type of chronic disease. The obstetrical patient will be a married pregnant female, preferably with a small family. The student will follow this patient through to delivery, and beyond that time for health maintenance. The husband and any other children will be included in the health maintenance plan.

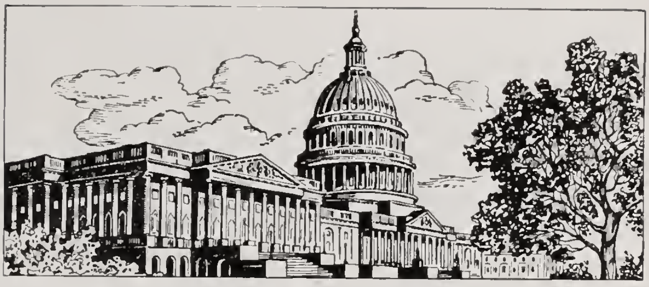
In order to bring this experience into a neighborhood setting, three geographic units have been set up. They will be centered at the George Washington University Hospital, in the downtown area; the Washington Hospital Center for Northwest Washington and adjacent suburban Maryland; and the Fairfax Hospital, which will include nearby portions of Northern Virginia. Families selected for this program will attend the clinic at whichever hospital is nearest their home. The health care for each family will be provided in the hospital clinic by the assigned student under the preceptorship of a designated physician from the faculty of the School of Medicine. The patients will be certified as "medically indigent" by a social service worker employed by the hospital. Acceptance by the patient will be voluntary. In the event the patient dies during the follow-up or moves from the area, another patient will be assigned to the student. Each patient will be followed for 20 months, always under the care of the same student and the same faculty preceptor in the same hospital. Some type of emergency coverage for both instructor and student will be worked out, as is necessary in private practice.

Dr. Joseph F. Sadusk, Jr., who heads the new department of Preventive Medicine and Community Health at George Washington, will be in charge of the entire program and will also coördinate the program at the University Hospital, with the assistance of Dr. William Morrisey. The preceptors at the University Hospital will be: (medicine) Drs. Jack Kleh and Charles Foulke; (obstetrics and gynecology) Drs. James Sites, William McKelway, Richard Erkenbeck, and Leonard Outlar; (surgery) Drs. John Hagenbucher and Thomas Alford.

Dr. Clayton B. Ethridge, Director of Postgraduate Medical Education at G.W., will coördinate the program at Fairfax Hospital. Preceptors will be: (medicine) Drs. Ethridge and Ronald Opter; (obstetrics and gynecology) Dr. Nelson Tart; (surgery) Drs. Thomas Wright and Allan Hall.

At the Washington Hospital Center Dr. Thomas W. Mattingly, Chairman of the Department of Medicine, and Dr. Theodore J. Abernethy, Chief of Staff, will be the coördinators. The preceptors will be: (medicine) Drs. Henry Ecker, Louis Craig, Bertle Nelson and Luther Hall; (obstetrics and gynecology) Drs. Samuel Dodek, Julius Epstein, S. Hazen Shea and J. Keith Cromer; (surgery) Drs. Ernest Gould and William Ferguson. The physician-coördinators will be assisted by many other staff

(*Continued on page 662*)



NEWS & PERSONALS

Meetings

The Washington Society for the History of Medicine will hold its second fall meeting on Monday evening, November 26, at 8:00 p.m. in Wilson Hall, Administration Building (third floor, Building No. 1) on the grounds of the National Institutes of Health in Bethesda, Md. The program for the meeting will consist of two papers:

"Development of Arabic Medicine During the Islamic Period and Its Impact on the West" by Sami Hamarneh, Ph.D., Acting Curator, Division of Medical Sciences, Smithsonian Institution.

"Bernard Connor (1666–1698): Physician, Traveler and Historian" by Baruch S. Blumberg, M.D., Chief, Geographic Medicine and Genetic Section, National Institute of Arthritis and Metabolic Diseases, NIH.

This Society, founded last year, is affiliated with the American Association for the History of Medicine and holds bimonthly meetings except during July and August. Its membership is made up of individuals from the medical and allied professions of the Greater Washington Area. Further information may be secured from Peter D. Olch, M.D., 4520 Everett Street, Kensington, Md.

The Diabetes Association of the District of Columbia will hold a one-day **Symposium on Diabetes** at the Washington Hospital Center, December 13. Dr. Thomas W. Mattingly, Chairman of the Department of Medicine, Washington Hospital Center, will open the meeting. The following papers will be presented during the morning session:

"Neuropsychiatric Aspects of Juvenile Diabetes," Dr. Reginald S. Lourie, Clinical Professor of Pediatrics and Psychiatry, George Washington University School of Medicine

"Diabetic Nephropathy," Dr. Max Ellenberg, Department of Medicine, Mt. Sinai Hospital, New York City

"The Course of Juvenile Diabetes Treated with Unmeasured Diet," Dr Harvey C. Knowles, Associate Professor of Medicine, University of Cincinnati School of Medicine

"Diabetic Microangiopathy," Dr. J. M. B. Bloodworth, Professor of Pathology, University of Wisconsin School of Medicine

The following papers have been scheduled for the afternoon session:

"Insulin Resistance and Insulin Antagonists," Dr. George W. Hamwi, Professor of Medicine, Ohio State University

"The Hypoglycemias," Dr. Jerome W. Conn, Professor of Medicine, University of Michigan

"Oral Hypoglycemic Agents," Dr. Alexander W. Marble, Senior Physician, Joslin Clinic, Boston

"Iatrogenic Diabetes," Dr. Rachmiel Levine, Professor of Medicine, New York Medical College

A $5.00 registration fee, to be charged all practicing physicians, will include luncheon. Residents, interns and other house staff members will be admitted free, but luncheon will not be included. The Association hopes for a good attendance at this informative meeting.

General News

The Executive Board of the Medical Society of the District of Columbia met in regular session on September 24; the Chairman, Dr. James W. Watts, presided. The policies of the Metropolitan Washington Blood Service Plan were presented to and approved by the Board.

The Board voted that Dr. Herbert P. Ramsey be nominated to receive the A. H. Robins Co. Award for distinguished community service. This award is to be presented at the Sheraton-Park Hotel during the SECOND INTERSTATE SCIENTIFIC ASSEMBLY.

Dr. Dale C. Cameron was appointed **Superintendent of St. Elizabeths Hospital,** October 9, by Secretary Celebrezze of the Department of Health, Education, and Welfare. He succeeds Dr. Winfred Overholser, who retired October 4.

DALE C. CAMERON, M.D.
Superintendent, St. Elizabeths Hospital

Dr. Cameron, a Nebraskan, received his degree in medicine from the University of Nebraska College of Medicine, and obtained a master's degree in Public Health from Johns Hopkins University in 1951. He is a diplomate of the American Board of Psychiatry and Neurology, Chairman of the Committee on Drug Addiction and Narcotics of the National Research Council and of the Committee on Narcotic Addiction of the American Medical Association, and a member of the American Psychiatric Association.

Dr. Cameron came to Washington in 1945 as Assistant Chief of the Mental Hygiene Division, which later became the National Institute of Mental Health in Bethesda. In 1954 he resigned to become Medical Director of the Minnesota Department of Public Welfare. He returned to Washington in 1960 when he was recommissioned by the Public Health Service as Assistant Superintendent of St. Elizabeths Hospital. In his new position he will hold the rank of Assistant Surgeon General of the Public Health Service. He is also Clinical Professor of Psychiatry at George Washington University.

The 1962 edition of **"Immunization Information for International Travel"** has been issued and may be obtained from the Superintendent of Documents, Government Printing Office, Washington 25, D. C. at 35 cents per copy.

The principal revisions are included in Section 5, which contains the most current information on the immunization requirements for entrance to other countries. New yellow fever vaccination centers to which the public may be referred have been added to Section 6.

Dr. H. C. Haynes has been named **Chief of Psychiatric Services for the Federal Aviation Agency.**

Dr. Haynes graduated in medicine from the College of Physicians and Surgeons, Columbia University, in 1952. After interning at St. Elizabeths Hospital in Washington he joined the United States Air Force in 1953. For three years he was a resident in psychiatry at Walter Reed Army Hospital. He received his aeronautical rating of Flight Surgeon in July, 1958. He is certified in psychiatry by the American Board of Psychiatry and Neurology. Since 1960 he has served as Clinical Instructor in Psychiatry at Georgetown University School of Medicine.

Mr. Donald F. Smith is the new **Administrator of Children's Hospital.** He assumed the position, October 1, replacing Miss Edith A. Torkington, who retired July 1. Mr. Smith was formerly Administrator of the Clifton Springs Hospital and Clinic in Clifton Springs, New York.

Dr. Aris Carpousis, who has directed a small orchestra for the last several years, writes that this group will provide music for dances sponsored by hospitals and other medical institutions or organizations which are conducting fund-raising projects for charitable purposes. The services are given free, but a small amount donated toward music and repair of instruments is acceptable. Dr. Carpousis's telephone number is Federal 3-6616.

Assistant Surgeon General Arnold B. Kurlander retired, September 30, from the Public Health Service after serving 23 years as a member of its Commissioned Corps. He has been named Director of Sinai Hospital in Baltimore, and assumed his new duties, October 1.

Dr. Kurlander was commissioned by the Public Health Service in 1939 after completing his internship at the PHS Hospital in New Orleans. His first Washington assignment was Chief of the Program Development Branch of the Division of Tuberculosis Control. He was named Assistant to the Surgeon General in 1957, and the following year was named Deputy Chief of the Service's Bureau of Medical Services. In 1960 he was appointed Assistant Surgeon General of the Service.

Dr. G. Halsey Hunt, Associate Executive Director of the Educational Council for Foreign Medical Graduates, Evanston, Ill., has won the Meritorious Service Medal of the Public Health Service for superior performance and achievement. Dr. Hunt was formerly Chief of the Division of Medical Sciences of the National Institutes of Health. He retired April 1, 1962, with the rank of Assistant Surgeon General after 26 years' tenure in Public Health Service. The Award, consisting of a silver medal and accompanied by a citation, was presented to Dr. Hunt at ceremonies, September 27, at NIH. Dr. James A. Shannon, Director of NIH, made the presentation.

The W. B. Saunders Company, well known medical and scientific publishing house, is marking its 75th Anniversary in 1963 by making available $15,000 for a medical writing award which will provide financially for a year's leave of absence for a distinguished investigator.

In applying for the award, the investigator, who should be a resident of the Americas, is asked to indicate briefly the character of his research and where it has been pursued, and to present a résumé of his scientific background and a bibliography. A committee, most of them physicians, will select the grantee. Applications should be submitted between January 1, 1963 and May 1, 1963 directly to the Chairman, Dr. Robert F. Loeb, care of W. B. Saunders Company, West Washington Square, Philadelphia 5, Pa.

The award winner will be selected by August 1, 1963 and a formal presentation will be made at an award dinner in October, 1963.

The Dr. A. B. C. Knudson Award was given this year **to Senator Hubert H. Humphrey,** of Minnesota, for his contributions to physical medicine and rehabilitation. The Award carries the name of Dr. Knudson, an Associate member of the D. C. Medical Society and Director of Physical Medicine and Rehabilitation Service, Veterans Administration.

Columbia Hospital for Women has been completely renovated and a new East Wing has been added to the building. This is the first major change since the Hospital was erected at 25th and L Streets, N.W., in 1914.

The new wing contains an outpatient clinic on the ground floor as well as laboratory and X-ray departments and a pharmacy. On the first floor are five delivery rooms, ten labor rooms, and a complete premature nursery. The second floor contains three new operating rooms, two surgical recovery rooms, and other rooms for adjunct services.

In all, the Hospital's facilities have been increased from 125 to 157 beds, and from 86 to 128 bassinets. Three additional delivery rooms and one additional operating room are now available.

The hospital operated at 80 per cent of its former capacity through the entire remodeling. Credit for the careful planning which made this possible goes to Mr. John A. Oley, Administrator, and Dr. Raymond T. Holden, Chief of Staff.

Joseph Gawler's Sons, Inc., one of Washington's oldest funeral homes, and a long-time supporter of the MEDICAL ANNALS through its monthly advertisement, has moved from the 1700 block of Pennsylvania Avenue, N.W., to a new, three-story location at Wisconsin Avenue and Harrison Street, N.W. This is the first move of the firm since it was established in 1850 by Joseph Gawler.

Personals

Dr. Winfred Overholser was the guest of honor at an informal reception held for him in the Red Cross Building on the grounds of St. Elizabeths Hospital on October 1. The occasion marked his retirement as Superintendent of the Hospital after completing 25 years in that office. Present were hundreds of guests, including staff members, both past and present, colleagues and friends from near and far.

WINFRED OVERHOLSER, M.D.
Superintendent, St. Elizabeths Hospital
1937–1962

Dr. Dale C. Cameron, Assistant Superintendent of the Hospital, presided during a brief program. Mr. Boisfeuillet Jones, who represented the Department of Health, Education and Welfare, read a special message from Secretary Anthony J. Celebrezze. Dr. and Mrs. Overholser were presented with a handsome gift of photographic equipment from staff members. Present for the occasion were their three children, Mrs. Richard O'Mara, of Stanford, Conn.; Mrs. C. R. Elliott, whose husband, Colonel Elliott, is stationed at the Wright-Patterson Field in Dayton, Ohio; and Dr. Winfred Overholser, Jr., of New York City.

Dr. Overholser, who is known as the "Dean of Forensic Psychiatry," is the author of "The Psychiatrist and the Law." He received the first Isaac Ray Award of the American Psychiatric Association for his contributions toward improving the relations of law and psychiatry. He has pioneered new techniques for treatment of the mentally ill and has encouraged new public attitudes toward mental illness. He is Past President of the American Psychiatric Association, a past Director of the National Committee for Mental Hygiene, and consultant to the Mental Hospital Service of the American Psychiatric Association.

His numerous awards and honors include the President's Award for Distinguished Federal Civilian Service and the Certificate of Distinguished Service from the Department of Health, Education and Welfare. He has also been decorated by foreign countries.

Dr. and Mrs. Overholser are residing at the Essex Apartments on Connecticut Avenue.

Dr. Richard L. Whelton, who has served as Deputy Coroner for the District of Columbia since 1959, has been appointed to the post of Coroner by the District Commissioners, effective September 1, succeeding Dr. A. Magruder MacDonald, who retired, August 31.

Dr. Whelton is a native of the District of Columbia and a graduate of McKinley Tech High School. He received his Bachelor of Science degree from the University of Maryland in 1943, and his medical degree from George Washington University School of Medicine in 1947. He served as Assistant Superintendent at District of Columbia General Hospital from December, 1952 to April, 1955, when he entered private practice.

The Commissioners promoted **Dr. Linwood L. Rayford, Jr.** from Deputy Coroner to Chief Deputy Coroner. He holds degrees from Marquette University, Yale, and Howard University College of Medicine, and was formerly Assistant Professor of Surgery at Howard. He was named Deputy Coroner in May, 1961.

Dr. Marion Mann, Assistant Dean of Howard University College of Medicine, was sworn in, October 1, as Deputy Coroner for the District of Columbia, thus adding a second pathologist to the Coroner's Office. He will relinquish his deanship to take up his new duties.

Dr. Mann received his medical degree from Howard in 1954. He served a residency in pathology at Georgetown University School of Medicine for four years and taught pathology at Georgetown until 1961, when he became Assistant Professor of Pathology at Howard. He is a Major in the Army Medical Corps Reserve.

Dr. Melvin T. Johnson, an Associate member of the D. C. Medical Society, is the new **Medical Director of the Civil Service Commission.** Dr. Johnson, who has been serving as Deputy Director, succeeds Dr. Eugene R. Chapin, who has retired after serving as Director for five years.

Dr. Richard H. Meredith, also an Associate member of the Medical Society, succeeds Dr. Johnson as **Deputy Director.** After receiving his medical degree from Georgetown University School of Medicine in 1938, Dr. Meredith practiced in Washington, and in Texas after 1950. He is transferring to Washington from a Federal agency in San Francisco.

Dr. Seymour Alpert, Professor of Anesthesiology at the George Washington University School of Medicine, was elected Director of the American Society of Anesthesiologists, Inc., representing District No. 7, for a three-year term. This district is composed of the District of Columbia and the states of Maryland, Virginia, and West Virginia.

Dr. Alpert is serving his first year as Editor-in-Chief of *Phi Delta Epsilon News*, an attractive publication, published quarterly, which contains considerable information within a compact format.

Dr. Irvin J. Cohen, an Associate member of the Medical Society of the District of Columbia, has left the Veterans Administration to become Medical Director of Maimonides Hospital in Brooklyn, N. Y. Formerly Assistant Chief Medical Director for Professional Services at the VA Central Office in Washington, he has been succeeded in this post by Dr. Oreon K. Timm, formerly Deputy to the Assistant Chief Medical Director for Operations.

CONGRATULATIONS TO THE CORONER

DR. A. MAGRUDER MACDONALD (left), retiring Coroner for the District of Columbia, congratulates his "own choice" to succeed himself, DR. RICHARD L. WHELTON, in front of the District Morgue.

Dr. Ralph G. Beachley, Director of Public Health in Arlington County, was one of ten honored for their efforts in behalf of the Northern Virginia Association for Retarded Children at its first awards banquet, October 16. Dr. Beachley is an Associate member of the D. C. Medical Society.

Dr. Victor H. Esch was certified by the American Board of Surgery on May 24, 1962.

Membership

The following applicants for membership were duly elected to membership by the Executive Board, September 24, 1962, in accord with Chapter II, Article VIII, of the Constitution and By-laws of the Society.

Active Members

Paul D. Barnes, Georgetown University Hospital
Jerome W. Canter, 1800 Eye Street, N.W.
Richard L. Cohen, 1712 Eye Street, N.W.
Morris Feitel, Washington Clinic
Edgar D. Griffin, 3636 16th Street, N.W.
James L. Hatleberg, 3000 Connecticut Avenue, N.W.
Allan M. McKelvie, 1801 Eye Street, N.W.
Robert E. Moran, Jr , 2025 Eye Street, N.W.
Ann S. Peterson, Georgetown University Hospital
Richard Schaengold, 3000 Connecticut Avenue, N.W.
Kenneth Somers, 1025 Vermont Avenue, N.W.
Robert H. Craft, 1015 Spring Street, Silver Spring, Md.

Associate Members

Gudrun M. Augustin-Rueckert, 4000 Tunlaw Road, N.W.
Ira D. Godwin, Annandale Medical Center
Leonard L. Kogan, 1106 Spring Street, Silver Spring, Md.
Arthur J. Levens, Walter Reed General Hospital
J. Allan Offen, 12432 Shadow Lane, Bowie, Md.
Ernst Thonnard, 915–19th Street, N.W.
William F. R. van de Graaff, Washington Clinic
Yvonne Van der Reyden, 2120 Yorktown Road, N.W.

Resident-Intern Member

Henry C. Mellette, St. Elizabeths Hospital

Clinically Undiagnosed Tuberculosis—Hollister

(*Continued from page 625*)

31. ALLEN, A. R., HARMON, R. W. J., KLACSAN, L. J., AND STEWART, K. M., JR.: Amer. J. Med., 1957, **22**, 904.
32. BERESFORD, O. D.: Amer. Rev. Tuberc., 1958, **77**, 323.
33. LEDWITH, J. W., AND GRAY, J. A. C.: Amer. Rev. Resp. Dis., 1961, **84**, 268.
34. KATZ, S., AND OTHERS: Ibid., 1960, **81**, 196.
35. Statement of the Committee on Therapy. Tuberculosis Control Programs for Nurses, Nursing Students and Hospital Personnel. Ibid., 1960, **82**, 886.

Needle Renal Biopsy—Beisel, Scalettar and Barry

(*Continued from page 629*)

cations was averted by prompt resuscitative measures. The likelihood that significant bleeding might occur could be inferred in cases 1 and 2 from the biopsy material itself. Because of this we advocate the processing of renal biopsy specimens during the post-biopsy period of observation. The presence of any unusual anatomic findings serves as a danger signal of the increased risk of bleeding and makes an additional period of observation mandatory.

SUMMARY

Three cases have been presented in which complications of renal biopsy did not become manifest until after a 48-hour period of post-biopsy observation. Hemorrhage in two of these patients might have been anticipated if the biopsy specimen had been processed for pathologic study within the period of observation. Rapid processing of renal biopsy material should be made a routine procedure.

REFERENCES

1. PARRISH, A. E., AND HOWE, J. S.: Kidney biopsy; review of 100 successful needle biopsies. AMA Arch. Intern. Med., 1955, **96**, 712.
2. KARK, R. M., AND OTHERS: Analysis of 500 percutaneous renal biopsies. Ibid., 1958, **101**, 439.
3. BRUN, C., AND RAASCHOU, F.: Results of 500 percutaneous renal biopsies. Ibid., 1958, **102**, 716.
4. SCHREINER, G. E., AND BERMAN, L. B.: Experience with 150 consecutive renal biopsies. Southern Med. J., 1957, **50**, 733.
5. ARNOLD, J. D., AND SPARGO, B.: Clinical use of percutaneous renal biopsy. Circulation, 1959, **19**, 609.
6. KARK, R. M., AND MUEHRCKE, R. C.: Biopsy of kidney in prone position. Lancet, 1954, **1**, 1047.

"Continuing Care Program" at G.W.

(*Continued from page 656*)

members. In fact, up to 100 physicians will be involved over the two-year period, 50 the first year and another 50 during the year 1963–64. This new program does not replace any part of the educational curriculum but will supplement it. Its success will depend upon the enthusiasm of both the faculty and the students and the responsibility for the patients which each participant assumes.

LOMOTIL®

(brand of diphenoxylate hydrochloride with atropine sulfate)

ANTIDIARRHEAL
TABLETS and LIQUID

lowers motility / relieves cramping / controls diarrhea

Roentgenographic studies by Demeulenaere[1] established that a single dose of 10 mg. of Lomotil slowed gastrointestinal transit within two hours and that it maintained its decelerating activity for more than six hours.

In diarrhea this lowered propulsion permits a physiologic absorption of excess fluid, lessens frequency and fluidity of stools and gives safe, selective, symptomatic control of most diarrheas. Concurrently, it conserves electrolytes and controls cramping.

Investigators have found the antidiarrheal action of Lomotil not only "excellent"[2] but "efficacious[3] where other drugs have failed. . . ."

DOSAGE: For *adults* the recommended initial dosage is two tablets (2.5 mg. each) three or four times daily, reduced to meet the requirements of each patient as soon as the diarrhea is under control. Maintenance dosage may be as low as two tablets daily. For *children* daily dosages, in divided doses, range from 3 mg. (½ teaspoonful three times daily) for infants 3 to 6 months to 10 mg. (1 teaspoonful five times daily) for children 8 to 12 years. Lomotil is supplied as unscored, uncoated white tablets of 2.5 mg. and as liquid containing 2.5 mg. in each 5 cc. A subtherapeutic amount of atropine sulfate (0.025 mg.) is added to each tablet and each 5 cc. of the liquid to discourage deliberate overdosage. The recommended dosage schedules should not be exceeded.

NOTE: Lomotil is an exempt narcotic preparation.

Descriptive literature and directions for use detailed in Physicians' Product Brochure No. 81 available from G. D. Searle & Co., P. O. Box 5110, Chicago 80, Illinois.

1. Demeulenaere, L.: Action du R 1132 sur le transit gastrointestinal, Acta Gastroent. Belg. 21:674-680 (Sept.-Oct.) 1958.
2. Kasich, A. M.: Treatment of Diarrhea in Irritable Colon, Including Preliminary Observations with a New Antidiarrheal Agent, Diphenoxylate Hydrochloride (Lomotil), Amer. J. Gastroent. 35 46-49 (Jan.) 1961.
3. Weingarten, B.: Weiss, J., and Simon, M.: A Clinical Evaluation of a New Antidiarrheal Agent, Amer. J. Gastroent. 35 628-633 (June) 1961.

G. D. SEARLE & CO.
Research in the Service of Medicine

ESTABLISHED 1873

WOMEN ASSISTANTS

In Washington and Suburbs

CALL COLUMBIA 5-7023
(*Six Trunk Lines*)

The S.H. Hines Company

Funeral Home

2901-03-05-07 FOURTEENTH STREET N.W.
Northeast corner Harvard and 14th Streets

W. R. FRANK HINES
President and General Manager

MODERN AIR-CONDITIONED ROOMS WITH CHAPEL, PIPE ORGAN AND REPOSING ROOMS ARRANGED TO MEET EVERY REQUIREMENT AT NO ADDITIONAL CHARGE. CREMATIONS.

No forfeiture of VETERAN'S BURIAL ALLOWANCE
THE EXPENSE IS A MATTER OF YOUR OWN DESIRE

No Branch Establishments
Convenient parking facilities adjoining Funeral Home

For peptic ulcer gastric hyperacidity and gastritis...

In year-long study on peptic-ulcer patients

New Creamalin® Antacid Tablets

*"...faster in onset of action...and for a longer period"**

"Clinical studies in 85 patients with duodenal ulcer ...confirmed the superiority of the new preparation [new Creamalin] over standard aluminum hydroxide preparations, in that prompt relief was achieved and maintained throughout the period of observation."*

Patients were followed for about one year.

New Creamalin promotes ulcer healing, permits less frequent feedings because it is so long-acting. Heartburn and epigastric distress were "...easily and adequately controlled...."* New Creamalin has the therapeutic advantage of a liquid antacid with the convenience of a palatable tablet. *It does not cause constipation.*

Each new Creamalin tablet contains 320 mg. of specially processed highly reactive dried aluminum gel (stabilized with hexitol) with 75 mg. of magnesium hydroxide. Minute particles offer a vastly increased surface area.

Dosage: Gastric hyperacidity—from 2 to 4 tablets as needed. Peptic ulcer or gastritis—from 2 to 4 tablets every two to four hours. *How Supplied:* Bottles of 50, 100, 200 and 1000.

Now also available—New Creamalin Improved Formula Liquid. Pleasant mint flavor—creamy pink color. Stabilized reactive aluminum and magnesium hydroxide gel (1 teaspoon equals 1 tablet). Bottles of 8 and 16 fl. oz.

Creamalin, trademark reg. U.S. Pat. Off.

*Schwartz, I. R.:
Current Therap. Res. 3:29, Feb., 1961.

Winthrop
LABORATORIES
New York 18, N.Y.

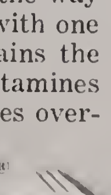
Whatever happened to handkerchiefs?

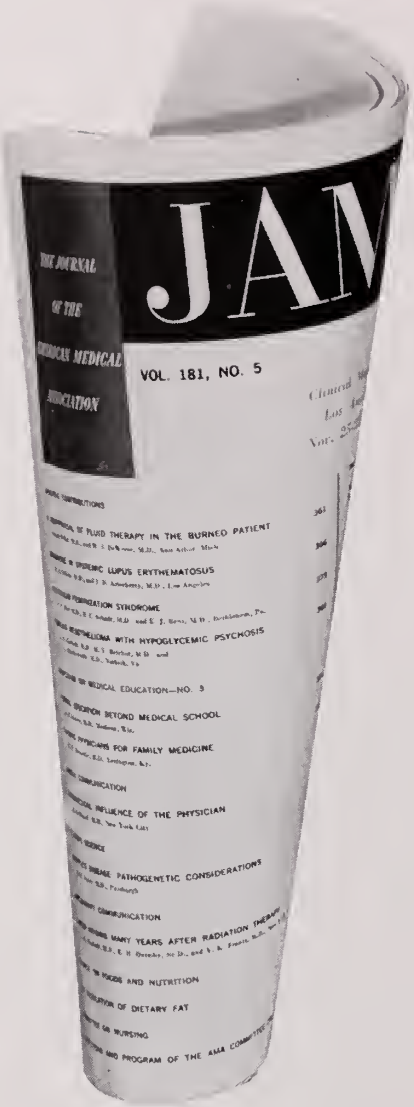
Remember when handkerchiefs were used for stuffy or runny noses? *That was before Naldecon.* Naldecon lets your head-cold patient breathe the way he should. Through the nose. Honest relief that lasts up to 8 hours with one sustained-action tablet. (When you need it, even *half* a tablet retains the sustained-action feature.) The counterbalance between *two* antihistamines and *two* decongestants* usually gives excellent results—seldom causes over-stimulation or sedation. Keep handkerchiefs for showing. Prescribe Naldecon.

*Each tablet contains phenylephrine HCl 10 mg., phenylpropanolamine HCl 40 mg., phenyltoloxamine citrate 15 mg., chlorpheniramine maleate 5 mg.—half in the outer layer, half in the sustained-action core. Each teaspoonful (5 cc.) of Naldecon Syrup contains the equivalent of one-half tablet.

NALDECON®
long-acting nasal decongestant/
antihistamine

BRISTOL LABORATORIES
Div. of Bristol-Myers Co.
Syracuse, New York




JAM
THE JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION
VOL. 181, NO. 5
FLUID THERAPY IN THE BURNED PATIENT
LUPUS ERYTHEMATOSUS
SYNDROME
WITH HYPOGLYCEMIC PSYCHOSIS
MEDICAL EDUCATION—NO. 3
BEYOND MEDICAL SCHOOL
FOR FAMILY MEDICINE
COMMUNICATION
INFLUENCE OF THE PHYSICIAN
PATHOGENETIC CONSIDERATIONS
COMMUNICATION
MANY YEARS AFTER RADIATION THERAPY
FOODS AND NUTRITION
OF DIETARY FAT
NURSING
AND PROGRAM OF THE AMA COMMITTEE

14 FL. OZ.
Betty Crocker
poly-unsaturated
Saff-o-life
SAFFLOWER OIL
for salads, baking and frying
Freshness preserved with BHA, BHT, propyl gallate, citric acid in propylene glycol.
General Mills

Because you are aware of the AMA statement on fat in the diet…

"Increasing the ratio of poly-unsaturated fat to saturated fat in the diet is the preferred method for treating the 'usual' hypercholesteremia."

From the Aug. 4, 1962 issue of The Journal of the American Medical Association.

Of all leading salad and cooking oils Safflower Oil has the highest ratio of poly-unsaturated fat to saturated fat. Safflower Oil is higher in recommended poly-unsaturates—lower in saturated fat than any other readily available oil or shortening.

When an adjustment in dietary ratio of saturated fat is indicated, Saff-o-life

you should be aware of this new, poly-unsaturated oil for cooking

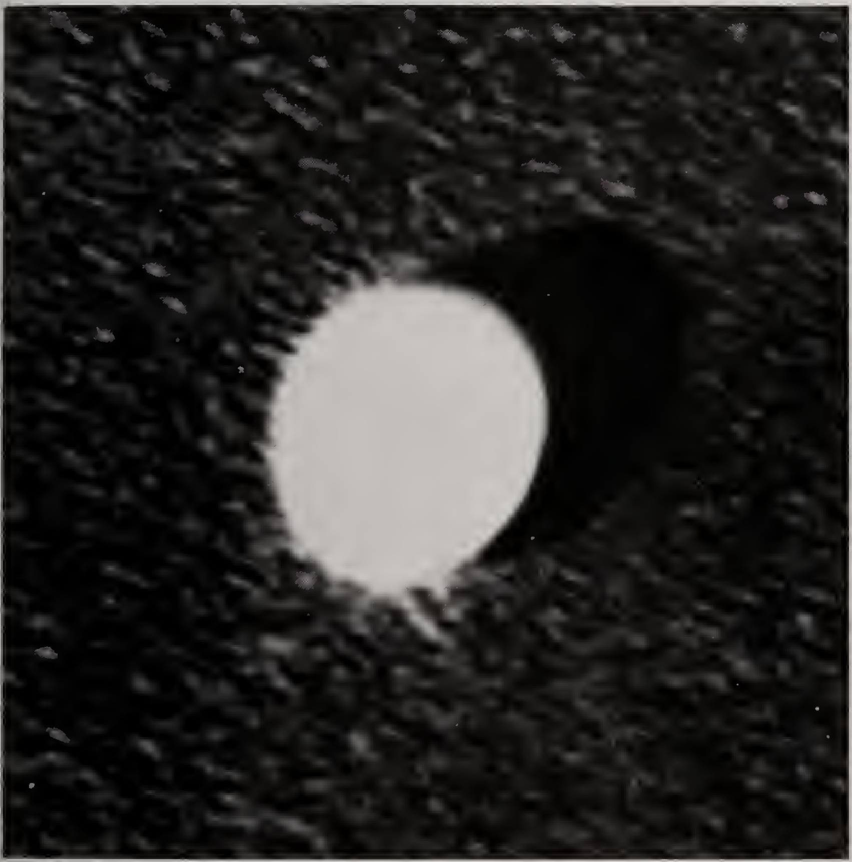
Safflower Oil makes the substitution easy, appetizing, inexpensive.

Physicians who wish recipes using Saff-o-life Safflower Oil are invited to write directly to: Professional Services Director, General Mills, Inc., Department 120, 9200 Wayzata Blvd., Minneapolis 26, Minnesota.

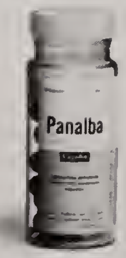
RATIO OF LINOLEATES* TO SATURATES *poly-unsaturated fats

SAFFLOWER OIL	9.0 to 1.0
CORN OIL	5.3 to 1.0
SOYBEAN OIL	3.5 to 1.0
COTTONSEED OIL	2.0 to 1.0
PEANUT OIL	1.6 to 1.0

A product of General Mills—Your assurance of quality and purity.



Goliath



David

Against the formidable and ubiquitous Staphylococcus aureus, PANALBA* gives you a powerful weapon. PANALBA is a selective combination of novobiocin (for its unique effectiveness against staph) and tetracycline (for its breadth of coverage). From the outset, your treatment has broader antibacterial coverage resulting from the simultaneous administration of two antibiotics that complement each other. They were carefully chosen for this purpose.

That is why PANALBA offers excellent chances for therapeutic success.

*TRADEMARK, REG. U.S. PAT. OFF.
COPYRIGHT 1962, THE UPJOHN COMPANY

Reminder
advertisement.
Please see
package insert for
detailed product
information.

Upjohn

THE UPJOHN COMPANY
KALAMAZOO, MICHIGAN

When treatment for
IMPOTENCE
is indicated
ANDROIDT.M. **tablets**
ANDROGEN-THYROID-COMBINATION

in two convenient dosage forms

ANDROID	**ANDROID-H.P.** **(High Potency)**
Each yellow tablet contains:	Each orange tablet contains:
Methyl Testosterone ....2.5 mg.	Methyl Testosterone ......5 mg.
Thyroid Ext. (1/6 gr.) ....10 mg.	Thyroid Ext. (1/2 gr.) ....30 mg.
Glutamic Acid ....50 mg.	Glutamic Acid ....50 mg.
Thiamine HCl ....10 mg.	Thiamine HCl ....10 mg.

INDICATIONS: **Impotence in male.**
AVERAGE DOSE: One tablet three times daily.
AVAILABLE: Bottles of 100 and 500 at your pharmacy.
CAUTION: Not to be used when testosterone is contra-indicated. Federal law prohibits dispensing without prescription.

1. *Methyltestosterone-Thyroid in Treating Impotence*, A. S. Titeff, *General Practice, Vol. 25, No. 2, February, 1962, pp. 6-8.*
2. *Thyroid-Androgen Relations*, L. Hellman, et al., *The Jrl. of Clin. Endocrinology and Metabolism, August 1959.*

Write for samples and literature...
BROWN **THE BROWN PHARMACEUTICAL COMPANY**
2500 West Sixth Street, Los Angeles 57, California

---

ethically promoted ....

COOK PRODUCTS

.... reasonably priced

NEW—for your next detail on COOK PRODUCTS:

FERROCETTES

IRON WITH ASCORBIC ACID IN
CHEWABLE TABLET FORM

NAUSERTS

A SUPPOSITORY FOR CONTROL OF
NAUSEA AND VOMITING IN CHILDREN

E. K. Cook & Company, Inc. **Bethesda, Maryland**

BONADOXIN®
for nausea and vomiting

Confirmed in over 7 years of clinical success:
Bonadoxin stops morning sickness in 9 out of 10 patients[1]

Highly effective in other emetic conditions: postoperatively, following irradiation procedures, infant colic.

BONADOXIN®
Tablets · Drops · Intramuscular

time-tested for efficacy and safety

1. Groskloss, H.H., Clancy, C.L., Healey, E.F., McCann, W.J., Maloney, F.D., Loritz, A.F.: Clinical Medicine (Sept.) 1955.

Study involving 287 patients. 261 patients experienced excellent to good results with Bonadoxin for relief of nausea and vomiting of pregnancy. No side effects reported.[1]

2. Albertson, H.A., Trout, Jr., H.H., Daily, F.W.: The American Journal of Surgery (Sept.) 1956.

"As a result of this study, it is our belief that the routine prophylactic use of the combination of meclizine hydrochloride and pyridoxine is a safe and effective method for lessening the incidence of postoperative nausea and vomiting. We are employing this preparation as a routine pre-operative medication."[2]

3. Goldsmith, J.W.: Minn. Med. (Feb.) 1957.

Study involving 620 patients, 537 patients experienced moderate to complete improvement of nausea and vomiting of pregnancy with Bonadoxin. Toxicity and intolerance to the medication in the dosage employed in these studies was zero.[3]

4. Codling, J.W.; Lowden, R.J.: Northwest Med. (March) 1958.

Study involving 76 pregnant patients with nausea and vomiting. The results indicated an overall response in 70 of 76 patients treated. No side reactions were observed in this clinical study.[4]

5. Bentley, M.D.: Journal of the Mich. State Med. Soc. (Sept.) 1959.

[Bonadoxin] "was found clinically effective in the prevention of pre-operative and post-operative nausea and emesis in 157 patients who underwent ocular surgery, while control drugs alone could not completely eliminate the symptoms. Bonadoxin did not cause side reactions in the preoperative or postoperative phase of this study."[5]

6. Bethea, R.C.: International Record of Med. (May) 1960.

"Our investigation of this drug indicates that in 88 per cent of the cases satisfactory relief of the distressing symptoms of early pregnancy was obtained without undesirable side effects, including sedation."[6]

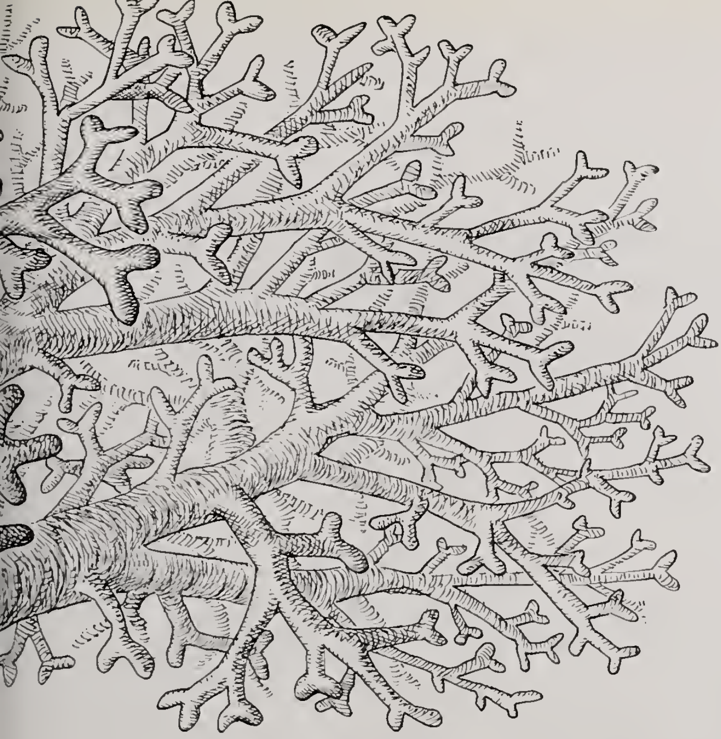
7. Sklaroff, D.M.; Karayannis, N.: Current Therapeutic Research (June) 1962.

"Based on these results, indicating 92 per cent effectiveness, meclizine-pyridoxine (Bonadoxin®) may be considered a valuable compound in the control of post-irradiation nausea and vomiting. The preparation proved to be safe and fast-acting in bringing therapeutic relief to carcinoma patients with radiation sickness."[7]

1955
1956
1957
1958
1959
1960
1962

ROERIG Rx
New York 17, N.Y.
Div., Chas. Pfizer & Co., Inc.
Science for the World's Well-Being®

gratifying
relief
in bronchial
asthma



unsurpassed for total patient benefits

Aristocort®

Triamcinolone Lederle

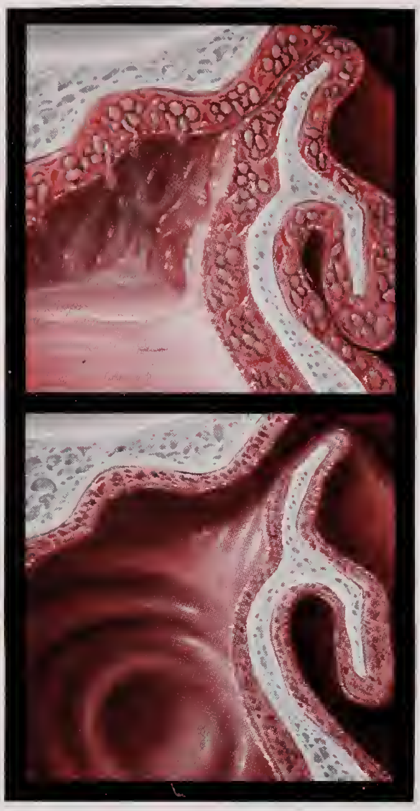
With ARISTOCORT, asthmatic patients obtain sustained relief of wheezing, dyspnea, and spasmodic coughing. It is of particular value in ameliorating severe attacks that may have serious sequelae. With ARISTOCORT, many patients who might otherwise be invalids are able to continue their customary livelihoods or maintain their regular household activities. Yet this symptomatic relief is not often accompanied by the hormonal collateral effects —sodium retention, edema, emotional disturbance, insomnia, voracious appetite— that so often have been a deterrent to steroid therapy.

SUPPLIED: Scored tablets (three strengths), syrup and parenteral. Request complete information on indications, dosage, precautions and contraindications from your Lederle representative, or write to Medical Advisory Department.

Lederle

LEDERLE LABORATORIES
A Division of
American Cyanamid Company
Pearl River, New York

In colds and sinusitis unsurpassed in providing drainage space without chemical harm



The clogged sinus
In sinusitis, the mucous membrane becomes hyperemic and edematous, lymph glands and goblet cells hyperactive. Ostium is closed by edema and secretions cannot drain freely.

The normal sinus
Magnified anatomy of a portion of maxillary sinus showing mucous membrane with cilia and lymph glands. Ostium is normal and patent.

NEO-SYNEPHRINE®
brand of phenylephrine hydrochloride
hydrochloride

NASAL SPRAYS AND SOLUTIONS

When there is nasal turgescence, tiny orifices of sinus ostia tend to clog. Neo-Synephrine nasal solutions and sprays reduce edematous tissues on contact to provide prompt relief. As turbinates shrink, obstructed sinus ostia open, drainage and breathing become freer and the boggy feeling of a cold disappears.

Delicate respiratory tissue and its natural defenses are not harmed by exceptionally bland Neo-Synephrine; systemic effects are nil; it does not sting. For years it has been recommended for prevention and treatment of sinusitis.[1-3] Repeated applications do not lessen effectiveness.

Available in plastic nasal sprays for adults (½%) and children (¼%), in dropper bottles of ⅛, ¼ or 1 per cent.

1. Grant, L. E.: Coryza and nasal sinus infections, **Clin. Med. & Surg.** 42:121, March, 1935. 2. Putney, F. J.: Sinus infection, in Conn, H. F. (Ed.): Current Therapy 1952, Philadelphia, W. B. Saunders Company, 1952, p. 110. 3. Simonton, K. M.: Current treatment of sinusitis, **Journal-Lancet** 79:535, Dec., 1959.

Winthrop LABORATORIES
New York 18, N.Y.

Stelazine® will stop anxiety—but not your patient!
brand of trifluoperazine

To be truly useful in your office patients, an ataractic agent must not only relieve anxiety; it must also leave these patients sufficiently alert to engage in their normal activities.

'Stelazine' is such an agent. Its ability to relieve anxiety without producing appreciable sedation has been established in thousands of patients and documented by many published reports. Typical is the finding of Kolodny,[1] who concluded that the primary advantage of 'Stelazine' over many other tranquilizers seems to be "its ability to relieve symptoms of anxiety without undue interference with alertness."

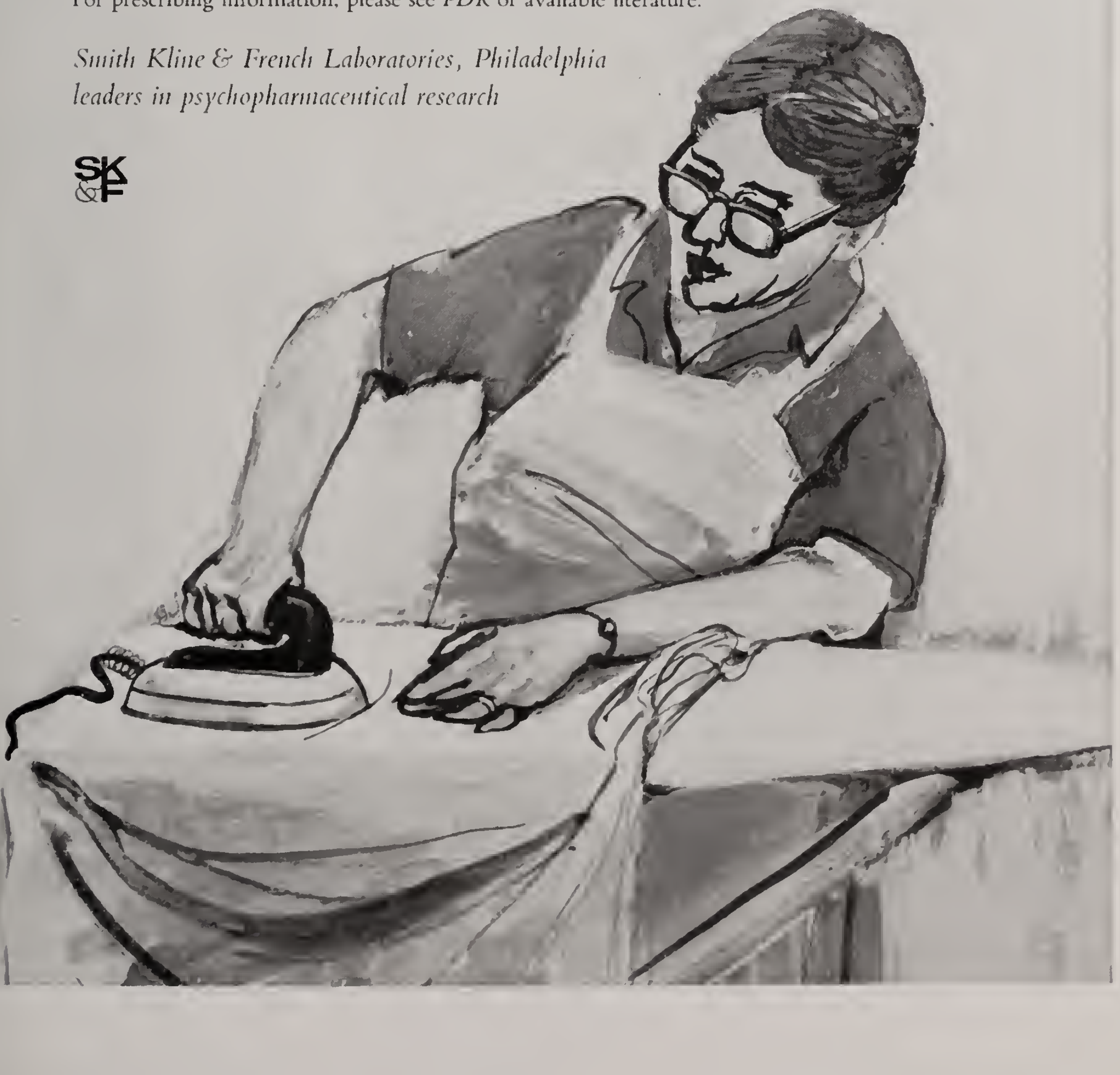
When you wish to relieve anxiety, yet encourage the patient to engage in his normal activities, consider 'Stelazine'.

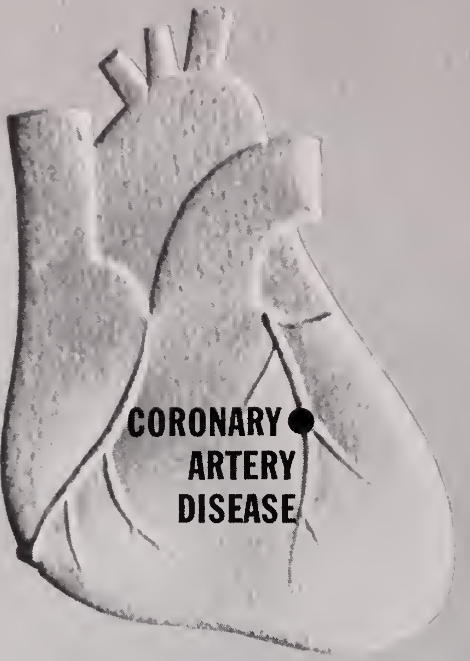
1. Kolodny, A.L.: Dis. Nerv. System *22*:151 (Mar.) 1961.

For prescribing information, please see *PDR* or available literature.

Smith Kline & French Laboratories, Philadelphia
leaders in psychopharmaceutical research

SK&F





● "...now the leading cause of death in diabetic patients."[1]

Diseases of the cardiovascular-renal system account for about three-fourths of deaths among diabetic patients, with heart disease responsible for approximately one-half the total,[2,3] and coronary atherosclerosis the major cause of cardiac lesions.[1] While some feel that diabetics are predisposed, perhaps by heredity, to early onset of vascular disease, considered opinion is that vascular degeneration can be delayed or modified with "...careful and consistent control of diabetes from the time of diagnosis...."[4]

As a major step toward achieving *careful and consistent control,* you can teach your patients to do urine-sugar testing in the way most likely to assure continued cooperation—with the CLINITEST® Urine-Sugar Analysis Set.

for quantitative estimation

color-calibrated

clinitest®

urine sugar

- continued, close control
- graphic *Analysis Record* encourages cooperation...reveals degree of control at a glance...helps patient maintain control

for "yes-or-no" enzymatic testing

new, improved

DIP AND READ **clinistix®**

urine glucose

10-second reading...longer strip for easier handling...new color chart and color barrier for test area...in glass for protection

Supplied: CLINITEST Urine-Sugar Analysis Set (with bottle of 36 tablets and 2 foil-wrapped tablets); refill boxes of 24 Sealed-in-Foil Reagent Tablets and bottles of 36 tablets. CLINISTIX Reagent Strips in bottles of 60.

References: (1) Root, H. F., and Bradley, R. F., in Joslin, E. P.; Root, H. F.; White, P., and Marble, A.: The Treatment of Diabetes Mellitus, ed. 10, Philadelphia, Lea & Febiger, 1959, pp. 411, 437. (2) Joslin, E. P.; Root, H. F.; White, P., and Marble, A.: *ibid.*, pp. 188-189. (3) Marks, H. H., *et al.:* Diabetes 9:500, 1960. (4) Marble, A., in Summary of Conference on Diabetic Retinopathy, Survey Ophth. (Part 2) 6:611-612, 1961.

AMES
COMPANY, INC
Elkhart • Indiana
Toronto • Canada

AMES *products are available through your regular supplier.*

21462

Why did 1,094 doctors order PRESTO Air Humidifiers last winter?

In December, 1961, a professional discount on the purchase of Presto Humidifiers was offered to physicians.* In addition to the obvious savings involved, there are these significant facts: **1.** Presto effectively adds needed moisture to dry, heated air. Discomforts of nose and throat due to below normal humidity are reduced. **2.** The unit is readily portable (stand optional at extra cost), plugs into any 115v A.C. outlet. Operation is simple, quiet, trouble-free. **3.** Tank (5-gal. capacity), cabinet and grill are rustproof; cabinetmaker styling harmonizes with home or office furnishings. **4.** New on Presto's 1962 model Humidifiers—a Humidistat Control maintains desired humidity setting automatically. Presto Air Humidifiers are available for patient use through retail outlets everywhere.

Special Discount to Physicians!

Presto Mark IV Humidifier (list $69.95) only $46.63. Stand, $5.30 additional. Mail coupon with check directly to . . .

Dept. SJ-1, National Presto Industries, Eau Claire, Wis.

NAME____________________

ADDRESS____________________

CITY____________________

STATE____________________

PRESTO
PRESTO®
ADDS NEEDED MOISTURE TO DRY, HEATED AIR!

*In response to the above offer, 1,094 physicians ordered Presto Humidifiers for their own use.

© N P [illegible], 1962

Invest in the
future health
of the nation
and your profession

Give to
medical education
through AMA-ERF

To train the doctors of tomorrow, the nation's medical schools must have your help today. It is a physician's unique privilege and responsibility to replenish his own ranks with men educated to the highest possible standards. *Medical education needs your dollars to stay strong. Send your check today!*

AMA-ERF

AMERICAN MEDICAL ASSOCIATION
EDUCATION AND
RESEARCH FOUNDATION

535 North Dearborn St., Chicago 10, Illinois

NATIONAL AND REGIONAL MEETINGS

December 10–12: National Conference on Air Pollution. Sheraton-Park Hotel, Washington. Address: Public Health Service, U. S. Department of Health, Education, and Welfare, Washington 25, D. C.

December 12–14: Eighth Hahnemann Symposium: Medical Considerations in the Surgical Patient. Sheraton Hotel, Philadelphia. Address: Dr. Wilbur W. Oaks, *Director*, Hahnemann Medical College and Hospital, 230 North Broad Street, Philadelphia 2, Pa.

December 26–31: American Association for the Advancement of Science. Philadelphia. Address: Dr. R. L. Taylor, 1515 Massachusetts Avenue, N.W., Washington 5, D. C.

February 6–9: American College of Radiology. Drake Hotel, Chicago. Address: Mr. William C. Stronach, *Executive Director*, 20 North Wacker Drive, Chicago, Ill.

March 6–9: American Orthopsychiatric Association, Inc. Shoreham Hotel, Washington. Address: Marion F. Langer, Executive Secretary, 1790 Broadway, New York 19, N. Y.

March 17–22: American College of Allergists. The Americana, New York. Address: Dr. D. Joseph Parsons, *Secretary*, 1405 East High Street, Springfield, Ohio.

March 18–21: Industrial Medical Association. Sheraton-Park Hotel, Washington. Address: Mr. Clark D. Bridges, Managing Director, 55 East Washington Street, Chicago 2, Ill.

March 18–21: Southeastern Surgical Congress. Americana Hotel, Miami Beach, Fla. Address: Dr. A. H. Letton, *Executive Secretary*, 340 Boulevard, N.E., Atlanta 12, Ga.

March 27–29: Annual Congress, American College of Allergists. The Americana, New York. Address: Eloi Bauers, *Executive Vice President*, 2160 Rand Tower, Minneapolis 2, Minn.

March 29–31: American Society of Internal Medicine. Brown Palace Hotel, Denver. Address: Mr. Albert V. Whitehall, *Executive Director*, 3410 Geary Blvd., San Francisco 18, Calif.

March 29–April 5: American Academy of General Practice. Chicago. Address: Mr. Mac F. Cahal, *Executive Director*, Volker Boulevard at Brookside, Kansas City 12, Mo.

April 1–5: Annual Spring Congress in Ophthalmology and Otolaryngology. Gill Memorial Eye, Ear and Throat Hospital, Roanoke, Va. Address: Superintendent, P. O. Box 1789, Roanoke, Va.

April 17–20: West Virginia Academy of Ophthalmology and Otolaryngology. Greenbrier Hotel, White Sulphur Springs, West Va. Address: Dr. Worthy W. McKinney, *Secretary*, Professional Park, Beckley, West Va.

April 21–24: 11th Annual Meeting, American College of Obstetricians and Gynecologists. Statler-Hilton Hotel, New York. Address: Craig W. Muckle, 1806 Garrett Road, Lansdowne, Pa.

RELIEVE THE COLD
SUPPRESS THE COUGH
WITH NEW
'EMPRAZIL-C'
TABLETS

ANTITUSSIVE ■ DECONGESTANT ■ ANALGESIC

Each tablet contains:

Codeine Phosphate*	15 mg.
'Sudafed'® brand Pseudoephedrine Hydrochloride	20 mg.
'Perazil'® brand Chlorcyclizine Hydrochloride	15 mg.
Acetophenetidin	150 mg.
Aspirin (Acetylsalicylic Acid)	200 mg.
Caffeine	30 mg.

*Warning—may be habit forming.

Complete literature available on request.

Also available without codeine as
'EMPRAZIL'®
TABLETS

BURROUGHS WELLCOME & CO. (U.S.A.) INC., TUCKAHOE, N.Y.

Trocinate® Brand of Thiphenamil HCl.

FOR DIVERTICULITIS, MUCUS COLITIS,

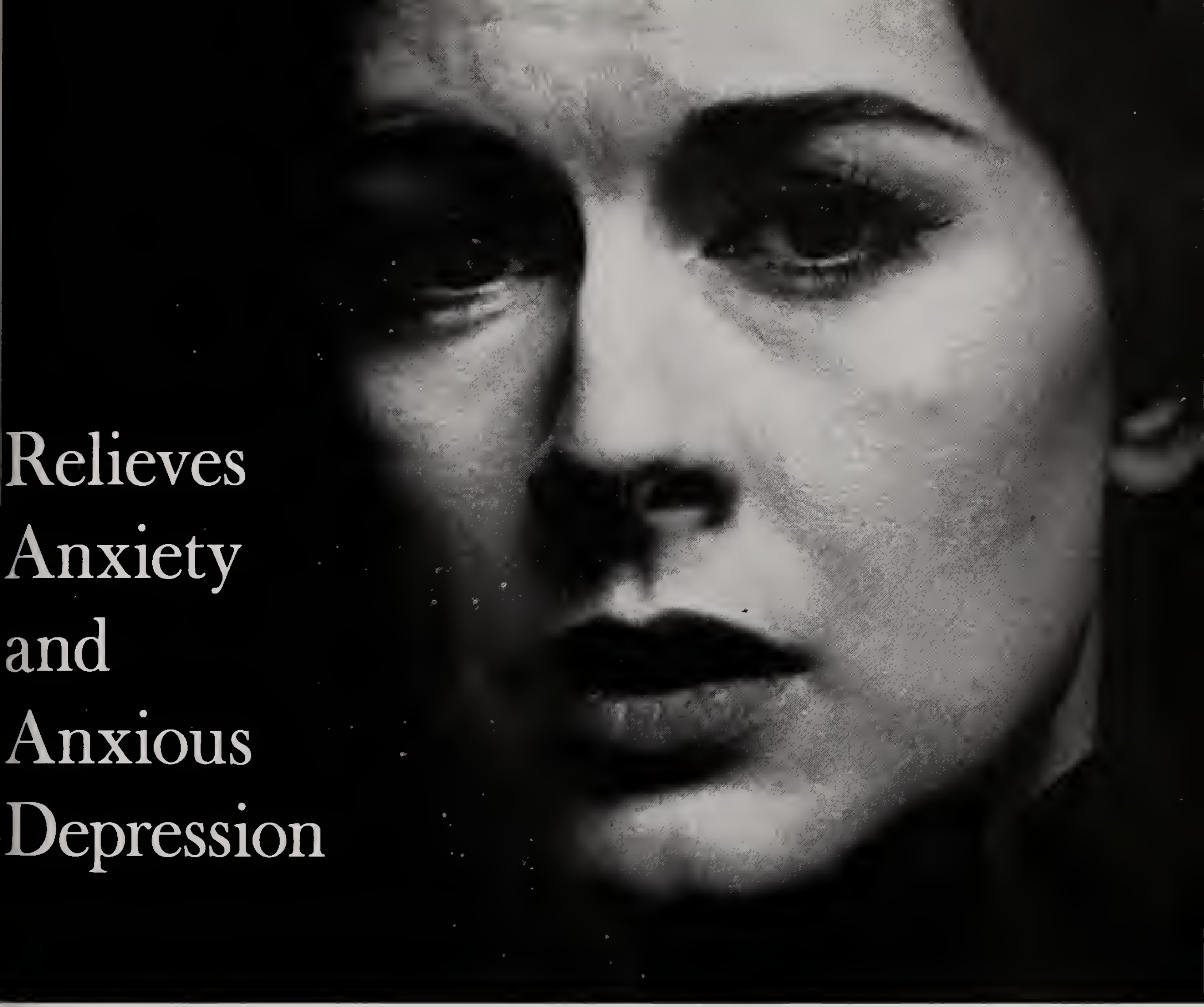
IRRITATIVE DIARRHEA, IRRITATIVE URETERITIS,

BLADDER SPASM

Trocinate is a musculotropic antispasmodic with no appreciable anticholinergic action. It relieves spasms of the lower bowel and genito-urinary tract by direct action on the contractile mechanism of smooth muscles. The absence of any appreciable action on the autonomic nervous system eliminates the usual side-effects. It may be safely used in glaucoma. Each tablet contains 100 mgs. Trocinate HCl.
USUAL DOSAGE: 2 tablets, 4 times a day. Maintenance dosage is frequently lower.

Dispensed in bottles of 40 and 250 tablets.

WM. P. POYTHRESS & COMPANY, INC., RICHMOND, VIRGINIA
Manufacturers of ethical pharmaceuticals since 1856



he outstanding effectiveness and record of safety with which iltown relieves anxiety and anxious depression—the type of epression in which either tension or nervousness or insomnia s a prominent symptom – has been clinically authenticated ime and again during the past seven years. This, undoubtdly, is one reason why physicians still prescribe meprobamate ore often than any other tranquilizer in the world.

Miltown®
meprobamate (Wallace)

Usual dosage: One or two 400 mg. tablets t.i.d.
Supplied: 400 mg. scored tablets, 200 mg. sugar-coated tablets; bottles of 50. Also as MEPROTABS® – 400 mg. *unmarked*, coated tablets; and in *sustained-release* capsules as MEPROSPAN®-400 and MEPROSPAN®-200 (containing respectively 400 mg. and 200 mg. meprobamate).

WALLACE LABORATORIES / *Cranbury, N. J.*

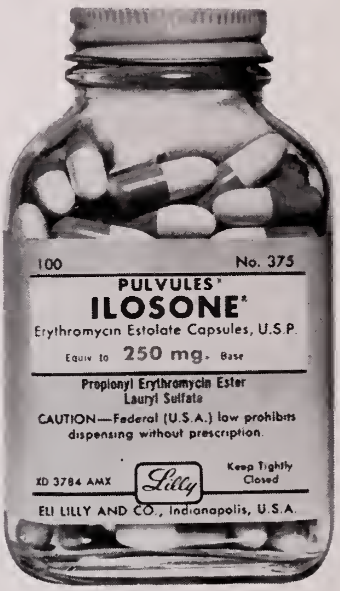
Clinically proven in over 750 published studies

1 Acts dependably – without causing ataxia or altering sexual function

2 Does not produce Parkinson-like symptoms or liver damage

3 Does not muddle the mind or impair physical activity

C::-7381


100
No. 375
PULVULES*
ILOSONE*
Erythromycin Estolate Capsules, U.S.P.
Equiv to 250 mg. Base
Propionyl Erythromycin Ester Lauryl Sulfate
CAUTION—Federal (U.S.A.) law prohibits dispensing without prescription.
XD 3784 AMX
Lilly
Keep Tightly Closed
ELI LILLY AND CO., Indianapolis, U.S.A.

sign of infection?

symbol of therapy!

Ilosone® is better absorbed—It provides high, long-lasting levels of antibacterial activity—two to four times those of other erythromycin preparations—even on a full stomach. **Ilosone is bactericidal**—It provides bactericidal action against streptococci, pneumococci, and some strains of staphylococci. **Ilosone activity is concentrated**—It exerts its greatest activity against the gram-positive organisms—the offending pathogens in most common bacterial infections of the respiratory tract and soft tissues.

The usual dosage for infants and for children under twenty-five pounds is 5 mg. per pound every six hours; for children twenty-five to fifty pounds, 125 mg. every six hours. For adults and for children over fifty pounds, the usual dosage is 250 mg. every six hours. In more severe or deep-seated infections, these dosages may be doubled. Ilosone is available in three convenient forms: Pulvules®—125 and 250 mg.*; Oral Suspension—125 mg.* per 5-cc. teaspoonful; and Drops—5 mg.* per drop, with dropper calibrated at 25 and 50 mg.

Lilly

This is a reminder advertisement. For adequate information for use, please consult manufacturer's literature.
Eli Lilly and Company, Indianapolis 6, Indiana. Ilosone® (erythromycin estolate, Lilly) *Base equivalent
232589

Ilosone works to speed recovery

THIS IS THE COLOR OF PROTECTION

BETADINE—The only germicide whose color indicates a germ-free environment—provides lasting protection and is the most potent non-irritating topical antiseptic known.

for the first time...
a universal microbicidal agent
that does not sensitize
or retard healing

Betadine®

Povidone-Iodine NND

Kills bacteria, viruses, fungi, yeasts and protozoa on contact. Non-injurious to skin, exposed tissue or mucous membranes.

Products available: Betadine Solution • Betadine Aerosol Spray • Betadine Vaginal Douche • Betadine Vaginal Gel • Betadine Shampoo • Betadine Ointment • Betadine Swab Aids • Betadine Surgical Scrub •

PHYSICIANS PRODUCTS CO., INC.
PETERSBURG, VIRGINIA

INSURANCE FOR THE DOCTOR

Russell, Marsh & Kennedy, Inc.
(formerly Hufty, Eubank & Russell, Inc.)

WILLIAM G. RUSSELL
President

1832 M Street, N.W.
Tel. FEderal 8-7600

PROFESSIONAL LIABILITY*
OFFICE PUBLIC LIABILITY
LOW COST TERM LIFE INSURANCE

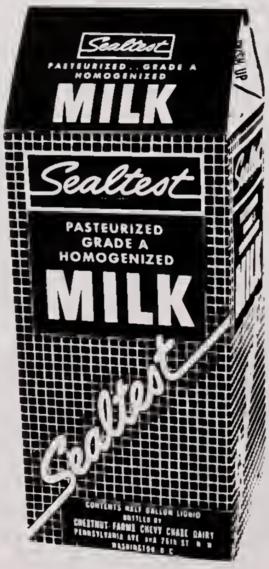
Also:

EMPLOYEES WORKMEN'S COMPENSATION
EQUIPMENT FLOATER
FIRE INSURANCE CONTENTS
BUSINESS EXPENSE DISABILITY
BONDS ON EMPLOYEES

AUTOMOBILE INSURANCE
ANNUITIES—FIXED & VARIABLE
NON-CAN DISABILITY INCOME
PENSION PLANS FOR DOCTORS
PENSION PLANS FOR EMPLOYEES

* Endorsed by The Medical Society of the District of Columbia

GREATER WASHINGTON'S MOST POPULAR VITAMIN D HOMOGENIZED MILK


Sealtest
PASTEURIZED GRADE A HOMOGENIZED
MILK
Sealtest
PASTEURIZED GRADE A HOMOGENIZED
MILK
Sealtest

MAXWELL
AND
TENNYSON
PHARMACISTS

"Where Pharmacy is a Profession"

M+T

Washington, D. C.

1801 Eye Street NAtional 8-0206
1835 Eye Street REpublic 7-4600
1726 Eye Street STerling 3-7077

Prescription called for and delivered without extra charge

Exclusive Distributor
Marcelle Cosmetics*
HYPO-ALLERGENIC
Chicago, Illinois

*Accepted for advertising in publications of the American Medical Association.

asthma attack averted
... in minutes

patient protected
... for hours

Nephenalin®
(the dual-action anti-asthmatic tablet)

... works with nebulizer speed—provides four-hour protection

One NEPHENALIN tablet provides: *air in a hurry*—through sublingual isoproterenol HCl, 10 mg. *air for hours*—through theophylline, 2 gr.; ephedrine, ⅜ gr.; phenobarbital, ⅛ gr.
Dosage: Hold one NEPHENALIN tablet under the tongue for five minutes to abort the asthmatic attack promptly. Then swallow the tablet core for four full hours' protection against further attack. Only one tablet should be taken every four hours. No more than five tablets in 24 hours.
Supplied: Bottles of 50 tablets. For children: NEPHENALIN Pediatric, bottles of 50 tablets.
Caution: Do not administer NEPHENALIN with epinephrine. The two medications may be alternated at 4-hour intervals. NEPHENALIN should be administered with caution to patients with hyperthyroidism, acute coronary disease, cardiac asthma, limited cardiac reserve, acute myocardial damage, and to those hypersensitive to sympathomimetic amines. Phenobarbital may be habit forming. THOS. LEEMING & CO., INC., New York 17, N.Y.

you can **safely** and **effectively**

NORMALIZE
bowel
function...

with THE Hydrophilic Colloids . . .

KONSYL or **L. A. FORMULA**

a mixture of pure hemicelluloses

pure hemicelluloses dispersed in lactose and dextrose

KONSYL
PLANTAGO
OVATA
COATING
BURTON, PARSONS & CO

- A liquid stool contains only 10 per cent more water than the hardest scybalum.[1]
- In diarrhea the hydrophilic colloid absorbs free fecal water to create a formed gel.[2]
- In constipation, the hydrophilic colloid retains water in the stool against the strong dehydrating function of the colon.[2]

L. A.
FORMULA
PLANTAGO
OVATA
COATING
BURTON, PARSONS & CO.

Since the most important single ingredient in the restoration of normal bowel function is a soft formed bulk of proper consistency, USE

KONSYL . . . . or . . . . L. A. FORMULA

for the obese patient who needs calorie-free medication

for the 'finicky' eater who requires unsurpassed palatability

to NORMALIZE both constipation and diarrhea

Made since 1932 by
BURTON, PARSONS & CO., INC., WASHINGTON 9, D. C.
Originators of Fine Hydrophilic Colloids

1. Tainter, M. L., and Buchanan, O. H., Ann. N. Y. Acad. Sc. 58:438, 1954.
2. Pinparker, B. D., Panstian, F. F., Roth, J. L. A. and Bockus, H. L., Gastroenterology 40:397, 1961.

Schering

Keep the rheumatic man in motion!

DELENAR loosens the rheumatic grip on muscles and joints, starts them functioning again—first by a direct relaxant action on skeletal muscle, again by its specific analgesic effects. And, while immediate symptomatic relief restores motion, underlying inflammation is reduced with the low-dosage corticosteroid.

Now you can restore comfortable motion safely, surely with DELENAR in rheumatoid arthritis/traumatic arthritis/early osteoarthritis/spondylitis/fibrositis/myositis/bursitis/tenosynovitis.

Formula:

Orphenadrine HCl	15 mg.	Proved muscle relaxant to relax spasm
Aluminum Aspirin	375 mg.	Fast analgesic relief of motion-stopping pain
Dexamethasone*	0.15 mg.	Low-dosage anti-inflammatory steroid

For complete details, consult latest Schering literature available from your Schering Representative or Medical Services Department, Schering Corporation, Bloomfield, N. J. **Bibliography:** 1. Ernst, E. M.: Pennsylvania M.J. 63:708 (May) 1960. 2. Settel, E.: Clin. Med. 7:1835 (Sept.) 1960.

*DERONIL® brand of dexamethasone H-415

loosens the rheumatic grip on muscles and joints

brand of antirheumatic preparation

Delenar®

THE MEDICAL ANNALS OF THE DISTRICT OF COLUMBIA is published by the Medical Society of the District of Columbia for the promulgation of information of scientific, general medical and personal interest.

Manuscripts for publication, news items, books for review, and correspondence relating to the editorial management should be sent to DR. WALLACE M. YATER, editor, MEDICAL ANNALS OF THE DISTRICT OF COLUMBIA, 1718 M Street, N.W., Washington 6, D. C.

Articles are accepted for publication on condition that they are contributed solely to this journal. Manuscripts must be typewritten, double spaced, and the original copy submitted. Photographs and drawings for illustrations must be carefully marked and show clearly what is intended. MEDICAL ANNALS will bear the cost of printing two cuts accompanying manuscripts submitted for publication. The cost of printing more than 2 cuts must be borne by the author.

Bibliographies should include the name of author (last name and initials), exact title of article, name of periodical, with volume, page, month (day of month in weekly), and year. References should be numbered consecutively in the order in which they appear in the text.

Matter appearing in the ANNALS is covered by copyright but, as a rule, no objection will be made to its reproduction in reputable medical journals, if proper credit is given. However, the reproduction for commercial purposes of articles appearing in the MEDICAL ANNALS OF THE DISTRICT OF COLUMBIA will not be permitted.

Reprints may be obtained at cost.

THE MEDICAL ANNALS OF THE DISTRICT OF COLUMBIA is published monthly. Subscription is included in the annual dues of members. To non-members the annual subscription price is: Domestic $4.50; Canadian, $5.00; foreign $5.50, including postage; single copies, fifty cents.

Checks, etc. should be made payable to the Medical Society of the District of Columbia.

KALORAMA CONVALESCENT HOME, INC.

Licensed by the D. C. Department of Licenses and Inspections

INSTITUTIONAL CARE
for the medical management of the acute stages of alcoholism.

2001 KALORAMA ROAD
at 20th Street, N.W. Decatur 2-2681

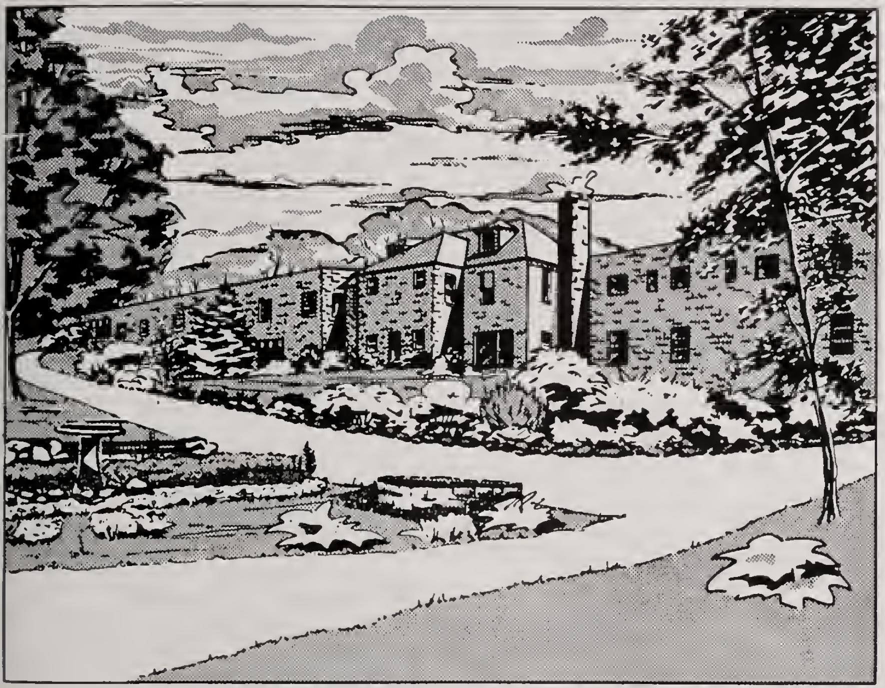
BEUCHLER'S
915-19th Street, N.W. Republic 7-6006

THE LAUREL SANITARIUM LAUREL, MARYLAND

Geriatric Hospital Buildings in centre of 122 acres.
ESTABLISHED 1905

Accommodations available for senile ambulatory women who need psychiatric care.

LICENSED FOR TREATMENT OF NERVOUS AND MENTAL DISEASES
Phone Parkway 5-1250—Jesse C. Coggins, M.D.—Medical Director



"All the Comforts of Home" . . .

for

POST OPERATIVE
•
MEDICAL
•
CONVALESCENT
•
DIABETIC
•
PARALYTIC
•
INVALID
•
AGED
•
CHRONIC
•
AMBULATORY
•
RETIRED GUESTS, ETC.

★ A MEDICAL INSTITUTION UNDER THE SUPERVISION OF REGISTERED NURSES ★
LICENSED BY STATE AND COUNTY

KENSINGTON GARDENS SANITARIUM

AN ULTRA-MODERN HOME IN THE SUBURBS ON TEN ACRES
WITH A COUNTRY ATMOSPHERE

3000 McComas Avenue Kensington, Maryland

MEMBER OF

CARE OF THE AGED

NATIONAL GERIATRICS SOCIETY

AMERICAN NURSING HOME ASSOCIATION

MEMBER
AND MARYLAND NURSING HOME ASSOCIATION

- Rehabilitation Facilities
- Private and Semi-Private Rooms with Connecting Baths
- Beautifully Decorated
- Television in Spacious Lounges
- Large Porches
- Lovely Lawns and Shade Trees
- Supervised Diets
- Patients May Retain Their Own Physician
- 24-Hour Nursing Care
- Reasonable Rates
- Recreation and Physical Therapy

For Further Information Phone

LOckwood 5-2291 or LOckwood 5-0872

Proprietors-Administrators

LILLIAN H. and GEORGE L. BRICKER

BOOKS RECEIVED

Acknowledgment is made of the following books which have recently been received.

Peripheral Vascular Diseases, 3rd ed. Edgar V. Allen, M.D., M.S., F.A.C.P., Nelson W. Barker, M.D., M.S., F.A.C.P., and Edgar A. Hines, Jr., M.D., M.S., F.A.C.P. With the assistance of John A. Spittell, Jr., M.D., and others. Price, $18.00. Pp. 1044, with 367 illustrations, 7 in color. Philadelphia: Saunders, 1962.

Primer of Clinical Measurement of Blood Pressure. George E. Burch, M.D., and Nicholas P. DePasquale, M.D. Price, $5.50. Pp. 141, illustrated. St. Louis: Mosby, 1962.

Clinical Biochemistry, 6th ed. Abraham Cantarow, M.D., and Max Trumper, Ph.D. Price, $13.00. Pp. 776, illustrated. Philadelphia: Saunders, 1962.

Medical Department, United States Army: Wound Ballistics. Colonel John Boyd Coates, Jr., M.C., Editor-in-Chief; Major James C. Beyer, M.C., Editor for Wound Ballistics. Prepared and published under the direction of Lieutenant General Leonard D. Heaton, The Surgeon General, United States Army. Price, $7.50. Pp. 883, illustrated. Washington 25, D. C.: Superintendent of Documents, U. S. Government Printing Office, 1962.

Medical Department, United States Army: Surgery in World War II. Activities of Surgical Consultants, Volume I. Colonel John Boyd Coates, Jr., M.C., Editor-in-Chief; B. Noland Carter, M.D., Editor for Activities of Surgical Consultants, and Elizabeth M. McFetridge, M.A., Associate Editor. Prepared and published under the direction of Lieutenant General Leonard D. Heaton, The Surgeon General, United States Army. Price, $6.50. Pp. 621, with 104 illustrations. Washington 25, D. C.: Superintendent of Documents, U. S. Government Printing Office, 1962.

Diagnosis and Management of Pain Syndromes. Bernard E. Finneson, M.D., F.A.C.S. Price, $8.50. Pp. 261. Illustrations by Barbara R. Finneson. Philadelphia: Saunders, 1962.

Surgery of the Chest. Edited by John H. Gibbon, Jr., M.D. Price, $27.00. Pp. 902, illustrated. Philadelphia: Saunders, 1962.

Strabismus: Symposium of the New Orleans Academy of Ophthalmology. Edited by George M. Haik, M.D. Price, $18.00. Pp. 369, with 202 illustrations. St. Louis: Mosby, 1962.

PHYSICIAN SUPPLIES
ANATOMICAL SUPPORTS
HOSPITAL EQUIPMENT

Instruments
Blood Chemistry Reagents
Disposable Products
Anatomical Supports—Stockings
Wheel Chairs—Hospital Beds
Office Equipment—Colostomy Supplies
Call ASSCO for Fast Delivery

ASSCO 1958 INTEGRUM ET SERVITIUM

ACCREDITED
SURGICAL SALES
3226 Wisconsin Ave., N.W. EM 3-9595
Washington, D. C.

Surgical Supplies and Equipment

Complete Fitting Service for
Ladies and Men

NELSON KLOMAN SURGICAL SUPPLY CO.
1018 - 18th Street, N.W
Washington 6, D. C.

Telephone: FEderal 8-5245

THE
BIRTCHER MEDICAL DISTRIBUTORS
OF D. C.

Complete lines of
Physical and Hydrotherapy Equipment
Electro-Surgical Equipment
Electrocardiograph–Cardioscope–
Defibrillator and Heart Pacer

Distributors for:

PROFEXRAY X-RAY EQUIPMENT

A complete line of Radiographic and Fluoroscopic Equipment from the small Portable to 900 ma–150 KVP and superficial therapy. Also, most makes of X-ray accessories.

New and used equipment always in stock.
3314 M Street, N.W., Washington 7, D. C.
FEderal 3-2660

T. J. STRATTON
MEDICAL EQUIPMENT REPAIR SERVICE
Official factory service station for
many manufactures.

PENSION PLANS FOR PHYSICIANS

under new Keogh Legislation

Eugene F. Roesser, C.L.U.

1130 Seventeenth Street, N.W.
Washington 6, D.C.
Telephone District 7-1114

McDERMOTT INSURANCE

Professional and Personal Insurance
Placement for the Doctor

1130 Seventeenth Street, N.W.
Washington 6, D.C.

Telephone District 7-1114

THE GIBSON COMPANY

57 years serving the medical profession

Medical and Surgical Supplies
Hospital, Invalid and Sickroom Supplies
Physiotherapy Equipment
Surgical Fitting Specialists
Expert Medical Equipment Repair Service

1908 K Street, N.W. **Federal 8-2688**

In the Chevy Chase Area
FOR THE BEST IN DRUGS AND SERVICE
IT'S

HIGGER'S

Complete Biological Stocks
Marcelle Hypo Allergenic Toiletries

HIGGER'S DRUGS, INC.
5015-17 Connecticut Avenue
Phone: Woodley 6-1815

CAPITAL NURSE REGISTRY

(Est. 1910)
Undergraduate
Practical

Nurses
Recommended
by Physicians

All Nurses Have Had Hospital Training
24 Hour Telephone Service

One of Washington's outstanding
Registries, serving physicians
and surgeons since 1910

LICENSED BY DISTRICT OF COLUMBIA

Your Patronage Solicited

Telephone
RAndolph 3-2600 or 3-1771

1942 . . . NINETEENTH ANNIVERSARY . . . 1962

PROFESSIONAL BUSINESS MANAGEMENT, INC.

JOHN C. POST, *President*

A PERSONAL SERVICE DESIGNED TO ASSIST THE DOCTOR WITH THE BUSINESS SIDE OF MEDICAL PRACTICE.

• *Medical Management Specialists* •

1000 20th Street, N.W. Tel. FEderal 8-3200

CLASSIFIED ADVERTISEMENTS

Advertisements under the following headings are charged at the rate of $5.00 for one insertion of 50 words or less; $4.00 each for three insertions; and $3.00 each for six insertions or more. All advertisements are payable in advance; the Editorial Board reserves the right to edit copy. Closing date for new copy, 20th of month preceding date of issue.

Classified advertisements of a professional nature are free to members.

SITUATIONS WANTED

GENERAL PRACTITIONER, age 37, desires to associate with other GP in D.C. on associate or partnership basis. Available immediately. Address Box 3, 1718 M Street, N.W. (6).

GENERAL SURGEON, Board-eligible, licensed in D. C., would like to affiliate full or part-time in partnership or with group or clinic. Will furnish full qualifications upon request. Address Box 80, 1718 M Street, N.W. (6)

PHYSICIANS WANTED

PHYSICIANS, licensed, for group practice. Four positions available for 24-hour coverage of Emergency Room, Suburban Hospital, Bethesda. Remuneration on fee-for-service basis with guaranteed income of $13,000. Telephone Mr. Payne, Oliver 6-6000.

APPROVED MEDICAL RESIDENCY PROGRAM: Applicants may apply to Administrator, The Alexandria Hospital, Alexandria, Va.

OTOLARYNGOLOGIST for active ENT practice and two fully equipped office locations, D. C. and Wheaton area. Available as unit or separately. Any reasonable terms for transfer will be considered. Telephone Hudson 3-4600.

PEDIATRICIAN for part-time work in medical clinic in Southeast Washington. Address Box 46, 1718 M Street, N.W. (6)

PRACTICE FOR SALE

GENERAL PRACTICE in California, for sale, association, or percentage basis. Huntington Beach (just south of Long Beach) out of smog. Beach 4 miles away. Practice grosses $5,975 monthly. Will accept cash for equipment and percentage of collectibles. Will introduce. Richard L. Siggers, M.D., G.W.U. 1949, 13861 Beach Blvd., Westminster, Calif.

REAL ESTATE

FOR SALE OR RENT: Ideal house-office for doctor and family: centrally air-conditioned rambler with 4 bedrooms and full basement; front and back porches; beautiful, fenced yard and shrubs. Located on University Blvd. between Langley Park and Four Corners, Md. Telephone Juniper 8-8700.

OFFICE SPACE AVAILABLE

FOR RENT: New Medical Building, 1726 Eye Street, N.W.; one large suite, 1400 sq. ft., or may be subdivided. All utilities furnished including switchboard service. Central air-conditioning. Parking available. Telephone 298-6936.

SUBLEASE: Large office, 1350 sq. ft., Park Lane Building, presently occupied by internist. Reasonable rental. Telephone Federal 7-6066; after 7 p.m., Emerson 5-3434

FOR RENT: First floor offices, air-conditioned, at 1830 K Street, N.W., consisting of consulting room, 3 examining rooms, reception room, with or without furniture, secretarial area, lavatory. Rental, $150. Telephone 296-4500.

FOR RENT: Newly decorated suite, fully air-conditioned, consisting of reception, consultation and 2 examining rooms, bath. Private parking. Washington Blvd. at McKinley Road, North Arlington, Va., Westover Area. Present specialists—GP, pediatrician, internist and dentist. OB-GYN needed for consultation and referral. Excellent opportunity for either auxiliary or main office. Telephone Jackson 7-7721.

FOR RENT: Office space, air-conditioned, at 1150 Connecticut Avenue, N.W. Consulting room, 2 examining rooms, secretary's office, large reception room furnished, laboratory, 2 bathrooms, dark room, X-ray room (10 by 15 feet) suitable for other purposes. Internist, dermatologist or surgeon. Address Box 57, 1718 M Street, N.W. (6)

FOR RENT: Vienna, Va.: Two-year-old building in new block designated for office buildings. First and second floor locations. Ample parking. Vienna's newest and largest dental suite now in building. Square footage flexible. Attractive lease. Telephone Mr. Copp, Dunkirk 5-9000 day or Dunkirk 5-9078 evening.

TO SHARE: Furnished office with pediatrician; 700 sq. ft in air-conditioned medical building in Silver Spring. Telephone Juniper 7-6777.

"Cappy"

INTRODUCES THE WASHINGTON AREA SPECIALISTS *in collections for Professionals*

I'M
"Cappy"
an Old Fashioned girl with MODERN ideas about bill collecting . . .

Unless We Collect, There Is No Charge

We offer a complete collection service to bring about prompt payments in a dignified, diplomatic manner for those lacking adequate facilities for enforced collections.

'PHONE 882-2000

CAPITAL CREDIT CORP.

7600 GEORGIA AVENUE, N.W. WASHINGTON 12, D.C.

Classified Advertisements (*Continued*)

FOR RENT: Office suite at 1625 Massachusetts Avenue, N.W.: reception room, 2 private offices, 2 treatment rooms, approximately 950 sq. ft.; air-conditioned. One parking space. Reasonable rental. Telephone Hobart 2-4700 or Randolph 6-1644.

TO SHARE: Offices in Silver Spring in new medical building on Spring Street. Fully furnished and equipped. Full-time nurse. Telephone 588-4820.

EQUIPMENT FOR SALE

BMR MACHINE, Model M Basal Meter, Liebel-Flarsheim; self-calculating basal metabolism apparatus; used very little. Telephone Sterling 3-4482.

"Registered Nurses—For Private Duty"

U. S. EMPLOYMENT SERVICE
PROFESSIONAL OFFICE

GRADUATE NURSES REGISTRY
1000 16TH STREET, N.W.
WASHINGTON 6, D. C.

CALL—DISTRICT 7-1129

24-hour telephone service—
7 days a week

"We Make Business Possible"

MALLOREY OFFICE SUPPLY COMPANY

Commerical Stationers
Printing
Office Supplies ● Engraving Office Furniture

732 9th Street, N.W.
Washington 1, D. C.
Republic 7-0414

NURSES REGISTRY

EXPERIENCED UNDERGRADUATES
& PRACTICAL NURSES

Recommended by Physicians
At Your Service for Day or Night Duty
In Washington and nearby area

CALL—RAndolph 6-6706
(A non-profit organization)

The Dignity and Tradition of a Gawler Funeral Cost No More Than Ordinary Services

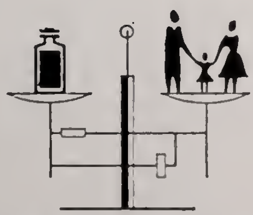
JOSEPH
GAWLER'S
SONS, INC.

FUNERAL DIRECTORS

Wisconsin Ave. and Harrison St. N.W.

Private parking on our premises for over 100 cars

THE BLOOD SERVICE PLAN
of the
Metropolitan Washington Blood Banks, Inc.
(Not for Profit)

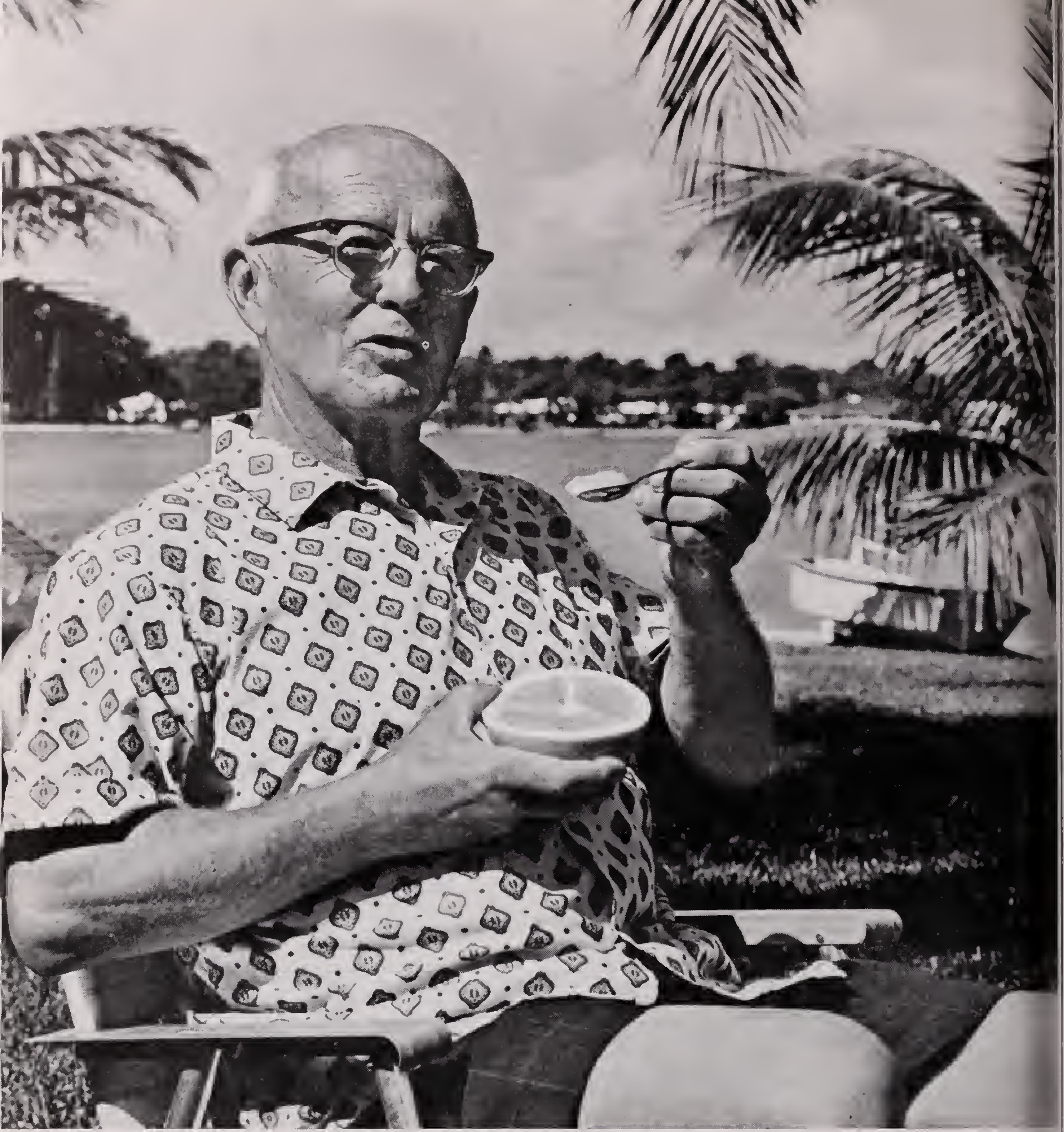


THE BLOOD SERVICE PLAN operates to supply or replace all the blood and plasma needed by a member who requires transfusions. Each member is guaranteed protection for **unlimited** blood replacement anywhere in the United States for the duration of the membership period.

For information telephone 347-2220

Suite 500-915 Nineteenth Street, N.W.

T. A. LOOSBROCK, Executive Director



The good life—just what the doctor ordered

Sea and sun are both in his doctor's orders — so is that grapefruit he's eating with such gusto. Citrus fruit is a wonderful way for this patient or any patient to get his daily quota of vitamin C . . . to enjoy something good to eat, tasty and satisfying but not rich.

Not all patients are so lucky as to have retired to Florida, where they can just reach out to pick citrus fruit off their own orange and grapefruit trees. But any patient anywhere can get the same benefits of the natural vitamin C in Florida oranges, grapefruit, and tangerines . . . thanks to modern methods of processing fresh fruit. Whether it is frozen, canned, or in cartons, 98% of the vitamin C content of the fruit is preserved.

Grapefruit and other citrus fruits filled with vitamin C are valuable in the nutrition of every age group. Among the teen-agers, vitamin C is one of the two nutrients most often low in the diet. Infants, too, need generous amounts of vitamin C; and they will take it readil when it comes to them in the form o delicious orange juice.

When your patient chooses *Florid* citrus, he can be sure of getting fruit fille with natural goodness and of just th right sweetness. Florida citrus is une celled because a State commissio watches over the entire Florida citru crop to see that it meets the world's high est standards for fresh, frozen, canne or cartoned citrus fruits or juices.

© Florida Citrus Commission, Lakeland, Florida

INDEX OF ADVERTISERS

Page

Bank

Riggs National Bank ... 4

Blood Service

Metropolitan Washington Blood Banks, Inc. ... 67

Business Counseling

Professional Business Management, Inc. ... 65

Collection Agencies

Capital Credit Corporation ... 66
Credit Bureau, Inc. ... 5

Dietetic Products

Duffy-Mott Company ... 29
J. H. Filbert, Inc. ... 34
Florida Citrus Commission ... 68
General Mills, Inc. ... 42
Sealtest Foods ... 58

Funeral Homes

Joseph Gawler's Sons, Inc. ... 67
S. H. Hines & Company ... 38

Insurance

McDermott Insurance ... 65
Mutual of Omaha ... 3-C
Eugene Roesser ... 65
Russell, Marsh & Kennedy, Inc. ... 58
St. Paul Fire & Marine Insurance Company ... 22

Nurse Registries

Association of Undergraduate and Practical Nurse Registry ... 67
Capital Nurse Registry ... 65
U. S. Employment Service for D. C. ... 67

Office Furniture and Supplies

W. D. Campbell Company ... 6
Mallorey Office Supply Company ... 67
National Presto Industries, Inc. ... 51

Pharmaceuticals

Abbott Laboratories ... 19–20
Ames Company ... 50
Bristol Laboratories ... 40–41
The Brown Pharmaceutical Company ... 44
Burroughs-Wellcome and Company 26–27, 53
Burton, Parsons & Company ... 60
Ciba Pharmaceutical Products ... 31
E. K. Cook & Company, Inc. ... 44
Endo Laboratories ... 10
Glenbrook Laboratories ... 17
Charles C. Haskell & Company ... 24
Lederle Laboratories ... 8, 21, 46–47
Thomas Leeming & Company, Inc. ... 11, 59
Eli Lilly & Company ... 36, 56
Parke, Davis & Company ... 2-C, 3
Pfizer Laboratories ... 14–15
Physicians Products Company ... 57
Wm. P. Poythress & Company ... 54
A. H. Robins Company ... 23
Roche Laboratories ... 4-C
J. B. Roerig & Company ... 45
Schering Corporation ... 35, 61
G. D. Searle & Company ... 37
Smith, Kline & French Laboratories ... 32, 49
Upjohn Company ... 12–13, 43
Wallace Laboratories ... 7, 33, 55
Winthrop Laboratories ... 18, 30, 39, 48, 70

Pharmacies

Higger's Drugs ... 65
Maxwell & Tennyson ... 58
Peoples Drug Stores ... 9

Sanitariums

Kalorama Convalescent Home ... 62
Kensington Gardens Sanitarium ... 63
Laurel Sanitarium ... 62

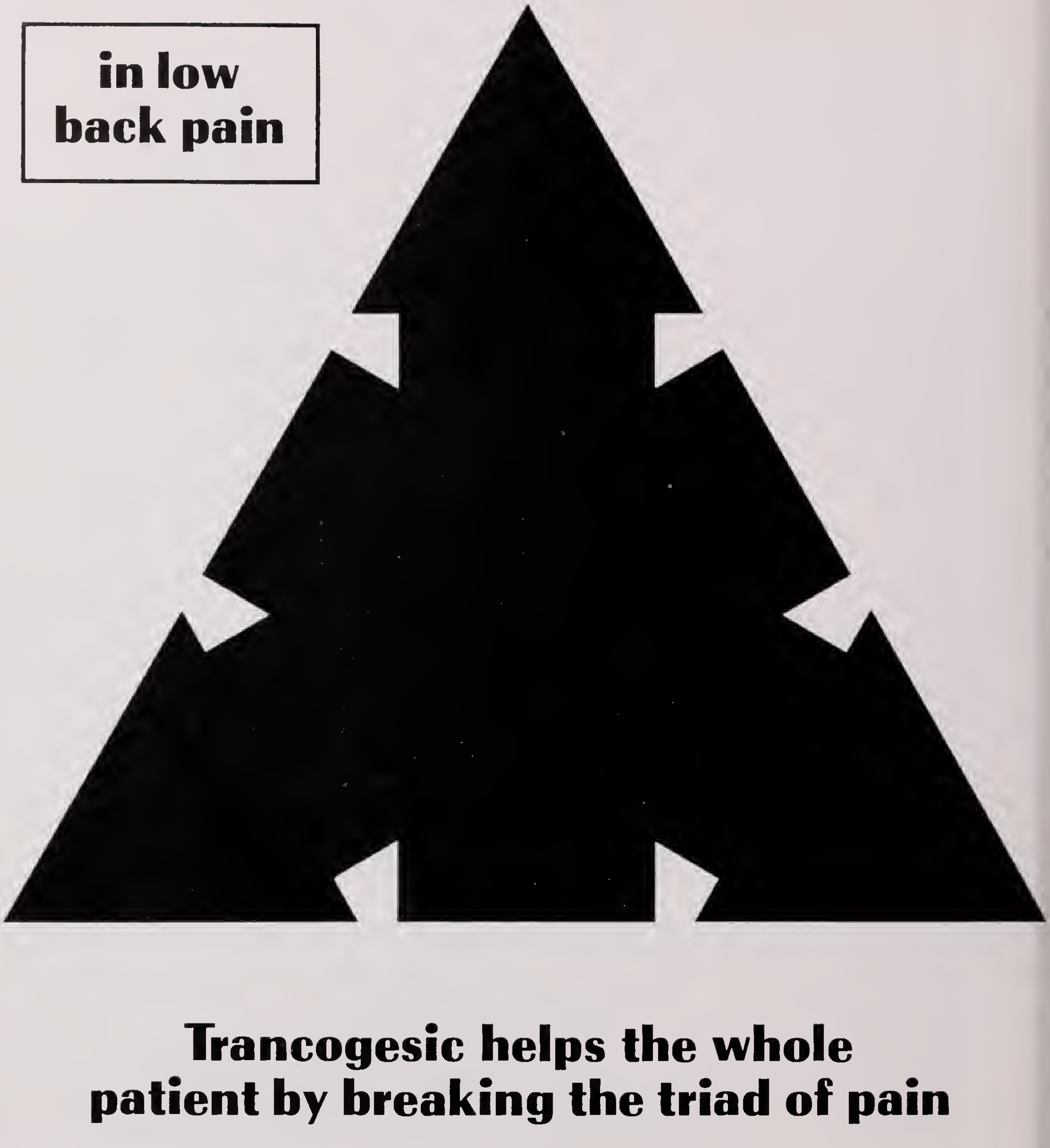
Surgical Supplies

Accredited Surgical Sales ... 64
Beuchler's, Inc. ... 62
Birtcher Medical Distributors of D. C. ... 64
Gibson Company ... 65
Nelson Kloman Surgical Supply Company ... 64

X-ray and Radium Equipment

General Electric Company ... 25

in low back pain



Trancogesic helps the whole patient by breaking the triad of pain

The action of Trancogesic is direct and as simple as 1, 2, 3. Its tranquilaxant component—chlormezanone—1. reduces emotional reaction to pain...2. decreases skeletal muscle spasm...and 3. its aspirin component dims the patient's perception of pain. Thus, Trancogesic treats the *whole* pain complex, helps the *whole* patient—*with unsurpassed safety.*

Each tablet of TRANCOGESIC contains 100 mg. of chlormezanone and 300 mg. (5 grains) of aspirin. The usual adult dosage is 2 tablets of Trancogesic three or four times daily; the dosage suggested for children from 5 to 12 years is 1 tablet three or four times daily. Before prescribing, consult Winthrop's literature for additional information about dosage, possible side effects, and contraindications. WINTHROP LABORATORIES, NEW YORK 18, N. Y.

TRANCOGESIC*
Brand of chlormezanone + aspirin
*TRADEMARK

Winthrop

730M

IMPORTANT ANNOUNCEMENT

NOW -- A NEW PLAN OF INCOME PROTECTION INSURANCE DESIGNED TO SUPPLEMENT YOUR OFFICIAL D.C. MEDICAL SOCIETY PLAN.

OUTSTANDING FEATURES:

- ✓ LIFETIME BENEFITS FOR ACCIDENTS.
- ✓ UP TO AGE 65 FOR SICKNESS.
- ✓ SICKNESS BENEFITS DOUBLE AFTER 5 YEARS OF DISABILITY UP TO AGE 65.

Available only to members now carrying the Basic Plan, Policy Form LMN.

For additional details write or call:

Joseph E. Jones
1666 Connecticut Avenue
Washington 9, D. C.

—

483 - 9005

Mutual
OF OMAHA
INSURANCE COMPANY

specific for anxiety & tension

Librium

The singular specificity of Librium in controlling anxiety and tension has proven to be an advantage in a wide range of disorders characterized by anxiety of varying degrees. Notably effective in patients whose symptoms are primarily emotional, Librium is equally valuable when organic disease is aggravated or prolonged by accompanying anxiety. Coupled with its effectiveness is an outstanding record of safety. Librium has few, if any, of the unwanted side effects associated with tranquilizers and daytime sedatives—no extrapyramidal effects, no autonomic blocking, and no dulling of mental alertness. Consult literature and dosage information, available on request, before prescribing.

the successor to the tranquilizers

LIBRIUM® Hydrochloride—7-chloro-2-methylamino-5-phenyl-3H-1,4-benzodiazepine 4-oxide hydrochloride

ROCHE

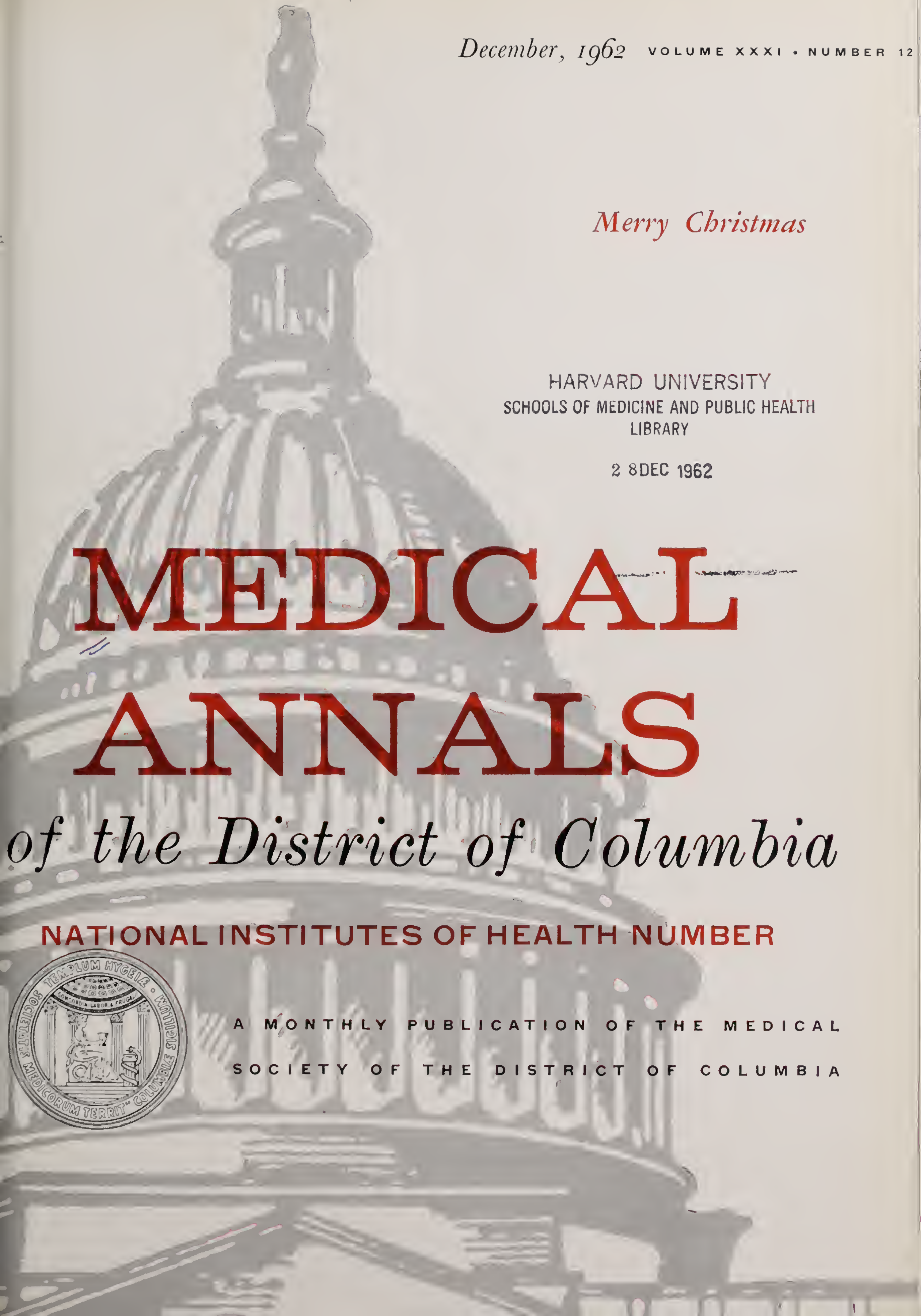
ROCHE

December, 1962 VOLUME XXXI • NUMBER 12

Merry Christmas

HARVARD UNIVERSITY
SCHOOLS OF MEDICINE AND PUBLIC HEALTH
LIBRARY

2 8DEC 1962



MEDICAL ANNALS
of the District of Columbia

NATIONAL INSTITUTES OF HEALTH NUMBER

A MONTHLY PUBLICATION OF THE MEDICAL SOCIETY OF THE DISTRICT OF COLUMBIA

when urinary tract infections present a therapeutic challenge…

CHLOROMYCETIN®

(chloramphenicol, Parke-Davis)

Often recurrent…often resistant to treatment, urinary tract infections are among the most frequent and troublesome types of infections seen in clinical practice.[1,2] In such infections, successful therapy is usually dependent on identification and susceptibility testing of invading organisms, administration of appropriate antibacterial agents, and correction of obstruction or other underlying pathology.

Of these agents, one author reports: "Chloramphenicol still has the widest and most effective activity range against infections of the urinary tract. It is particularly useful against the coliform group, certain Proteus species, the micrococci and the enterococci."[1] CHLOROMYCETIN is of particular value in the management of urinary tract infections caused by *Escherichia coli* and *Aerobacter aerogenes*.[3] In addition to these clinical findings, the wide antibacterial range of CHLOROMYCETIN continues to be confirmed by recent *in vitro* studies.[4-6]

CHLOROMYCETIN (chloramphenicol, Parke-Davis) is available in various forms, including Kapseals® of 250 mg., in bottles of 16 and 100. See package insert for details of administration and dosage.

Warning: Serious and even fatal blood dyscrasias (aplastic anemia, hypoplastic anemia, thrombocytopenia, granulocytopenia) are known to occur after the administration of chloramphenicol. Blood dyscrasias have occurred after both short-term and prolonged therapy with this drug. Bearing in mind the possibility that such reactions may occur, chloramphenicol should be used only for serious infections caused by organisms which are susceptible to its antibacterial effects. Chloramphenicol should not be used when other less potentially dangerous agents will be effective, or in the treatment of trivial infections, such as colds, influenza, or viral infections of the throat, or as a prophylactic agent. *Precautions:* It is essential that adequate blood studies be made during treatment with the drug. While blood studies may detect early peripheral blood changes, such as leukopenia or granulocytopenia, before they become irreversible, such studies cannot be relied upon to detect bone marrow depression prior to development of aplastic anemia.

References: (1) Malone, F. J., Jr.: *Mil. Med.* 125:836, 1960. (2) Martin, W. J.; Nichols, D. R., & Cook, E. N.: *Proc. Staff Meet. Mayo Clin.* 34:187, 1959. (3) Ullman, A.: *Delaware M. J.* 32:97, 1960. (4) Petersdorf, R. G.; Hook, E. W.; Curtin, J. A., & Grossberg, S. E.: *Bull. Johns Hopkins Hosp.* 108:48, 1961. (5) Jolliff, C. R.: Engelhard, W. E.; Ohlsen, J. R.; Heidrick, P. J., & Cain, J. A.: *Antibiotics & Chemother.* 10:694, 1960. (6) Lind, H. E.: *Am. J. Proctol.* 11:392, 1960.

68961

PARKE-DAVIS

PARKE, DAVIS & COMPANY, Detroit 32, Michigan

The
RIGGS
NATIONAL BANK
of WASHINGTON, D. C.

FOUNDED 1836

LARGEST BANK IN THE NATION'S CAPITAL

COMPLETE BANKING AND TRUST SERVICE

RESOURCES OVER $500,000,000

MAIN OFFICE
1503 PENNSYLVANIA AVENUE, N.W.
(Opposite U. S. Treasury)

BRANCHES

FARMERS & MECHANICS
Wisconsin Ave. and M St., N.W.

DUPONT CIRCLE
1913 Massachusetts Ave., N.W.

PARK ROAD
14th St. and Park Rd., N.W.

SEVENTH & EYE STREET
7th and Eye St., N.W.

NORTHEAST BRANCH
1348 4th St., N.E.

SEVENTH & D STREET
318 7th Street, N.W.

NORTHWEST
1779 Columbia Rd., N.W.

FRIENDSHIP
Wisconsin Ave. and Warren St., N.W.

CHEVY CHASE
Conn. Ave. and Morrison St., N.W.

LINCOLN BRANCH
17th and H Sts., N.W.

WASHINGTON LOAN
AND TRUST BRANCH
F St. at 9th, N.W.

17th & G STREET
BRANCH
14th and G Sts., N.W.

•

FACILITY
WALTER REED ARMY MEDICAL CENTER

TRUST DEPARTMENT OFFICE
1508 H Street, Northwest

Member Federal Deposit Insurance Corporation • Member Federal Reserve System

MEDICAL ANNALS

of the District of Columbia

EDITORIAL OFFICE:
1718 M Street, N.W., Washington 6
Telephone DIstrict 7-3111

COPYRIGHT, 1962,
BY THE MEDICAL SOCIETY
OF THE DISTRICT OF COLUMBIA.

Yearly Subscription, $4.50
Single Number, 50¢

Second-class postage paid at Baltimore, Md.
Published monthly at
Mount Royal and Guilford Avenues,
Baltimore 2, Maryland

Contents for December

NATIONAL INSTITUTES OF HEALTH NUMBER

SCIENTIFIC ARTICLES

A Symposium on Cancer Chemotherapy:

I. Hormone-producing Tumors. *Roy Hertz, M.D.*, Bethesda, Md. 663

II. Malignant Lymphoma and Chronic Leukemia. *Paul P. Carbone, M.D.*, Bethesda, Md. 669

III. Solid Tumors. *Emil Frei III, M.D.*, Bethesda, Md. 671

IV. Acute Leukemia. *Emil J. Freireich, M.D.*, Bethesda, Md. 675

V. Hormonal Therapy in Breast, Prostate and Uterine Cancers. *Mortimer B. Lipsett, M.D.*, Bethesda, Md. 683

Current Developments in Penicillin Therapy and Hypersensitivity. *Harry G. Steinman, Ph.D., and Michael W. Brandriss, M.D.*, Bethesda, Md. 689

EDITORIALS

Dr. Hussey Accepts New Post 701

Role of Cigarette Smoking in the Causation of Disease 702

The Medical Service Reporter 703

How Many People Have Lived? 703

(Continued on page 6)

Are You Really Different, DOCTOR?

ASSOCIATED CREDIT BUREAUS OF AMERICA, INC.
MEDICAL CREDITS DIVISION

It's an ironical fact that many patients feel doctors make so much money their bills can be neglected or even completely ignored. But these same patients buy automobiles, television sets, etc.

The doctor's office assistant can help prevent this by (1) checking a patient's record with THE CREDIT BUREAU, and (2) using COLLECTRITE SERVICE with those slow-pay patients.

Ask Mr. Kane
at NAtional 8-0680
for information.

PHYSICIANS AND DENTISTS ADJUSTMENT SERVICE

A Division of
The Credit Bureau, Inc.
Washington, D. C.

Contents for December

(*Continued*)

SPECIAL ARTICLE

Pension Plans for Physicians under the New Keogh Law. *Eugene F. Roesser, LL.B.*, Washington 706

MISCELLANY

Cancer Page: Cancer of the Breast 699
President's Page: To the Membership 700
Extension of Dependents' Medical Care Identification Cards. *Colonel Bryan C. T. Fenton, MC, USA*, Washington 705
Second Interstate Scientific Assembly 707
News and Personals 710
Membership 714
Woman's Auxiliary Notes 714
Blue Shield Enrollment Passes 50-million Member Mark 715
Obituaries 716
Index 717
Medical Annals Staff and Officers of Medical Society *Adv. 18*
Book Reviews *Adv. 26*
National and Regional Meetings *Adv. 30*
Books Received *Adv. 60*
Classified Advertisements *Adv. 62*
Index of Advertisers *Adv. 65*

Specialists in Office PLANNING

The W. D. Campbell Company knows the fine points of business furniture and furnishings. It will pay you to call on our experienced planning and decorating service. No obligation on your part.

Put your problems in the creative hands of our experts.

Phone MEtro. 8-5660

The W. D. Campbell Company
WASHINGTON'S LEADING OFFICE FURNITURE SUPPLIERS, SINCE 1917
1014 Fifteenth Street, N.W. Washington 5, D. C.
Free parking in the building

BONADOXIN®
for nausea and vomiting

Confirmed in over 7 years of clinical success:

Bonadoxin stops morning sickness in 9 out of 10 patients[1]

Highly effective in other emetic conditions:

postoperatively, following irradiation procedures, infant colic.

BONADOXIN®
Tablets · Drops · Intramuscular

time-tested for efficacy and safety

1. **Groskloss, H.H., Clancy, C.L., Healey, E.F., McCann, W.J., Maloney, F.D., Loritz, A.F.: Clinical Medicine (Sept.) 1955.**

Study involving 287 patients. 261 patients experienced excellent to good results with Bonadoxin for relief of nausea and vomiting of pregnancy. No side effects reported.[1]

2. **Albertson, H.A., Trout, Jr., H.H., Daily, F.W.: The American Journal of Surgery (Sept.) 1956.**

"As a result of this study, it is our belief that the routine prophylactic use of the combination of meclizine hydrochloride and pyridoxine is a safe and effective method for lessening the incidence of postoperative nausea and vomiting. We are employing this preparation as a routine pre-operative medication."[2]

3. **Goldsmith, J.W.: Minn. Med. (Feb.) 1957.**

Study involving 620 patients, 537 patients experienced moderate to complete improvement of nausea and vomiting of pregnancy with Bonadoxin. Toxicity and intolerance to the medication in the dosage employed in these studies was zero.[3]

4. **Codling, J.W.; Lowden, R.J.: Northwest Med. (March) 1958.**

Study involving 76 pregnant patients with nausea and vomiting. The results indicated an overall response in 70 of 76 patients treated. No side reactions were observed in this clinical study.[4]

5. **Bentley, M.D.: Journal of the Mich. State Med. Soc. (Sept.) 1959.**

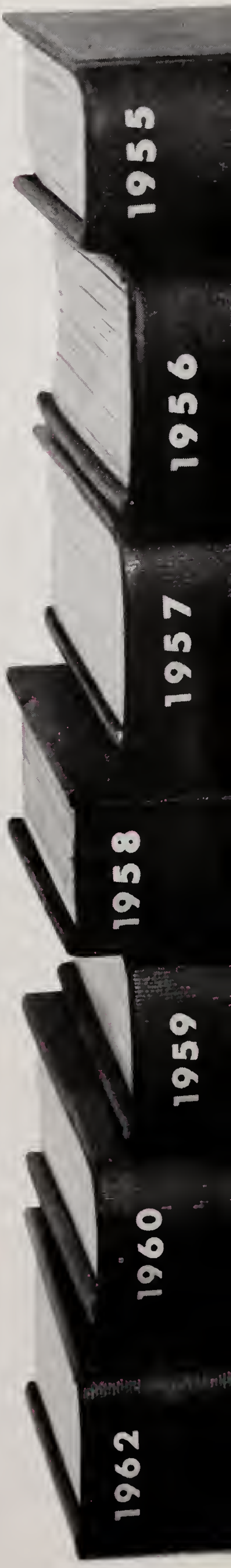
[Bonadoxin] "was found clinically effective in the prevention of pre-operative and postoperative nausea and emesis in 157 patients who underwent ocular surgery, while control drugs alone could not completely eliminate the symptoms. Bonadoxin did not cause side reactions in the preoperative or postoperative phase of this study."[5]

6. **Bethea, R.C.: International Record of Med. (May) 1960.**

"Our investigation of this drug indicates that in 88 per cent of the cases satisfactory relief of the distressing symptoms of early pregnancy was obtained without undesirable side effects, including sedation."[6]

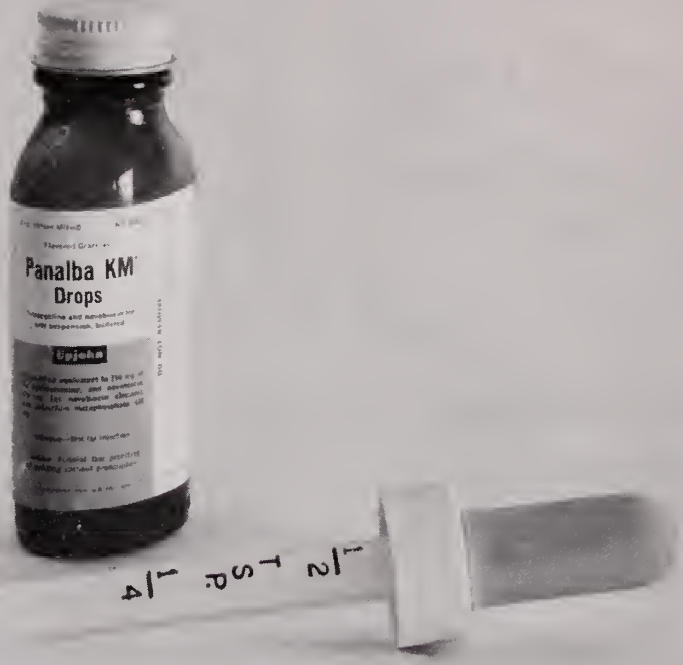
7. **Sklaroff, D.M.; Karayannis, N.: Current Therapeutic Research (June) 1962.**

"Based on these results, indicating 92 per cent effectiveness, meclizine-pyridoxine (Bonadoxin®) may be considered a valuable compound in the control of post-irradiation nausea and vomiting. The preparation proved to be safe and fast-acting in bringing therapeutic relief to carcinoma patients with radiation sickness."[7]



ROERIG

New York 17, N.Y.
Div., Chas. Pfizer & Co., Inc.
Science for the World's Well-Being®



Supplied: Flavored granules for suspension, in 30 cc. bottles with dropper-stopper calibrated in ¼ and ½ teaspoonful graduations. After mixing and shaking with 25 cc. water, each 5 cc. teaspoonful of suspension will contain:
Panmycin* (tetracycline) equivalent to tetracycline hydrochloride .... 125 mg.
Albamycin* (as novobiocin calcium) .... 62.5 mg.
Potassium metaphosphate ... 100 mg.

Usual pediatric dosage: ½ teaspoonful per 7½ to 10 pounds of body weight per day, administered in two to four equally divided doses.

(*Reminder advertisement.* Please see package insert for detailed product information.)

*TRADEMARK, REG. U.S. PAT. OFF.
COPYRIGHT 1962, THE UPJOHN COMPANY

THE UPJOHN COMPANY
KALAMAZOO, MICHIGAN

Upjohn

Liquid asset

Now that we have added a new liquid-dosage form to our Panalba* family, you may prefer to begin treatment with Panalba KM* Drops when dealing with infections caused by susceptible organisms in infants and children. From the outset, pending laboratory determinations, your treatment is broadened in antibacterial coverage because of the simultaneous administration of two antibiotics that complement each other. They were carefully chosen for this purpose.

Panalba combines tetracycline (selected for its breadth of coverage) and novobiocin (selected for its unique effectiveness against staph). That is why Panalba offers excellent chances for therapeutic success.

"Scientific reports linking cholesteral and heart attacks have touched off a new food fad among do-it-yourself Americans. But dieters who believe they can cut dawn their blood cholesterol without medical supervisian are in far a rude awakening. It can't be dane. It could even be dangerous ta try."

AMA press release October 12, 1962

Physicians are asking us

. . . what is the Dairy Industry doing about the question of diet and heart disease?

Many millions of dollars from government and private sources are spent on heart research each year. For more than two decades the Dairy Industry has contributed substantially to this research effort. Specifically, we have sponsored investigations in medical and university laboratories concerning:

- The development of heart disease in humans, primates and other experimental animals.
- The evaluation of various blood lipids—including cholesterol, triglycerides, and lipoproteins—as indices to the presence of cardiovascular disease or of therapeutic success.
- The determination of the fundamental origin of cardiovascular disease at the cellular level.
- The relationship of food components (including fats, proteins, carbohydrates, minerals, and vitamins) and their interrelationship in the above areas.

This research program is continuing and has, in fact, been expanded.

At present there is no final answer to the heart disease question. The following excerpt from a recent AMA release summarizes our position concisely:

"*There have been few investigations on the effect of different types of fat in the normal diet over a long period of time. For this reason, it is not known what type of fat, if any, may be beneficial in preventing heart disease, nor is it known that certain fats are harmful . . . neither the Food and Nutrition Board of the National Research Council nor the AMA Council on Foods and Nutrition has recognized the need for modification of dietary fat for the general public.*"

Guided by similar professional evaluation, our nutrition education program urges the public to recognize that changes in the diet for possible heart disease prevention should be administered only under medical guidance. Recently the AMA suggested that diet therapy might be tried as "an experimental therapeutic procedure" for certain types of patients. Whether a patient should be so treated is a question for the physician to decide. We consider indiscriminate public "prescribing" and mass advertising suggestions of dietary "cures" for heart disease an invasion of the time-honored physician-patient relationship.

The AMA and other groups have concluded that, for the public at large, weight control coupled with improved physical fitness are the best preventive procedures for heart disease and many other chronic diseases. The most desirable approach appears to be dietary moderation rather than modification. The Dairy Industry provides carefully prepared weight control educational materials based on accepted nutritional recommendations.

The Dairy Industry will continue its research and education efforts and provide, through a variety of dairy foods, vital nutrients that are essential for the improvement of human life through better nutritional well-being.

DAIRY COUNCIL OF GREATER METROPOLITAN WASHINGTON, D.C.

A nonprofit health education organization affiliated with National Dairy Council

1511 K Street, N.W., Washington 5, D.C.

When treatment for

IMPOTENCE

is indicated

ANDROIDT.M. **tablets**

ANDROGEN-THYROID-COMBINATION

in two convenient dosage forms

ANDROID

Each yellow tablet contains:
Methyl Testosterone ....2.5 mg.
Thyroid Ext. (1/6 gr.) ....10 mg.
Glutamic Acid ....50 mg.
Thiamine HCl ....10 mg.

ANDROID-H.P.

(High Potency)

Each orange tablet contains:
Methyl Testosterone ......5 mg.
Thyroid Ext. (1/2 gr.) ....30 mg.
Glutamic Acid ....50 mg.
Thiamine HCl ....10 mg.

INDICATIONS: **Impotence in male.**

AVERAGE DOSE: One tablet three times daily.

AVAILABLE: Bottles of 100 and 500 at your pharmacy.

CAUTION: Not to be used when testosterone is contra-indicated. Federal law prohibits dispensing without prescription.

1. *Methyltestosterone-Thyroid in Treating Impotence*, A. S. Titeff, *General Practice, Vol. 25, No. 2, February, 1962, pp. 6-8.*
2. *Thyroid-Androgen Relations*, L. Hellman, et al., *The Jrl. of Clin. Endocrinology and Metabolism, August 1959.*

Write for samples and literature...

BROWN **THE BROWN PHARMACEUTICAL COMPANY**
2500 West Sixth Street, Los Angeles 57, California

---

ethically promoted . . . .

COOK PRODUCTS

. . . . reasonably priced

NEW—for your next detail on COOK PRODUCTS:

FERROCETTES

IRON WITH ASCORBIC ACID IN
CHEWABLE TABLET FORM

NAUSERTS

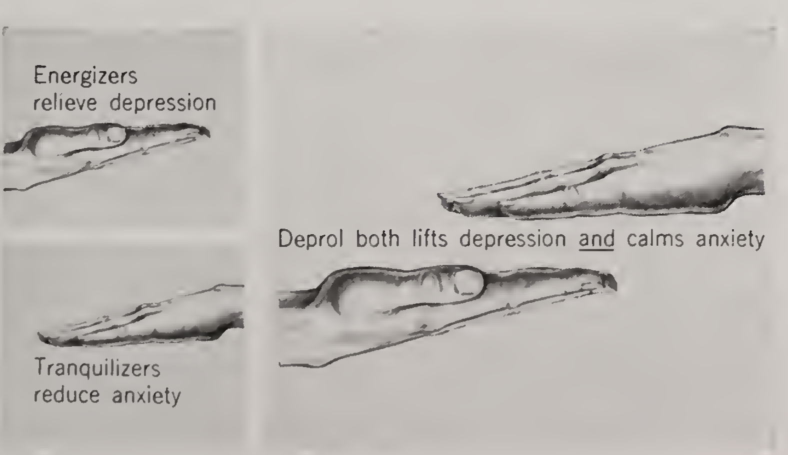
A SUPPOSITORY FOR CONTROL OF
NAUSEA AND VOMITING IN CHILDREN

E. K. Cook & Company, Inc. **Bethesda, Maryland**

LIFTS DEPRESSION ...AS IT CALMS ANXIETY

"I feel like my old self again!" Balanced Deprol therapy has helped relieve her insomnia and fatigue – her normal energy, drive and interest have returned.

Brightens mood...relaxes tension


Energizers relieve depression
Tranquilizers reduce anxiety
Deprol both lifts depression and calms anxiety

Dosage: Usual starting dose is 1 tablet q.i.d. When necessary, this may be increased gradually up to 3 tablets q.i.d. With establishment of relief, the dose may be reduced gradually to maintenance levels.

Composition: 1 mg. 2-diethylaminoethyl benzilote hydrochloride (benactyzine HCl) and 400 mg. meprobamate.

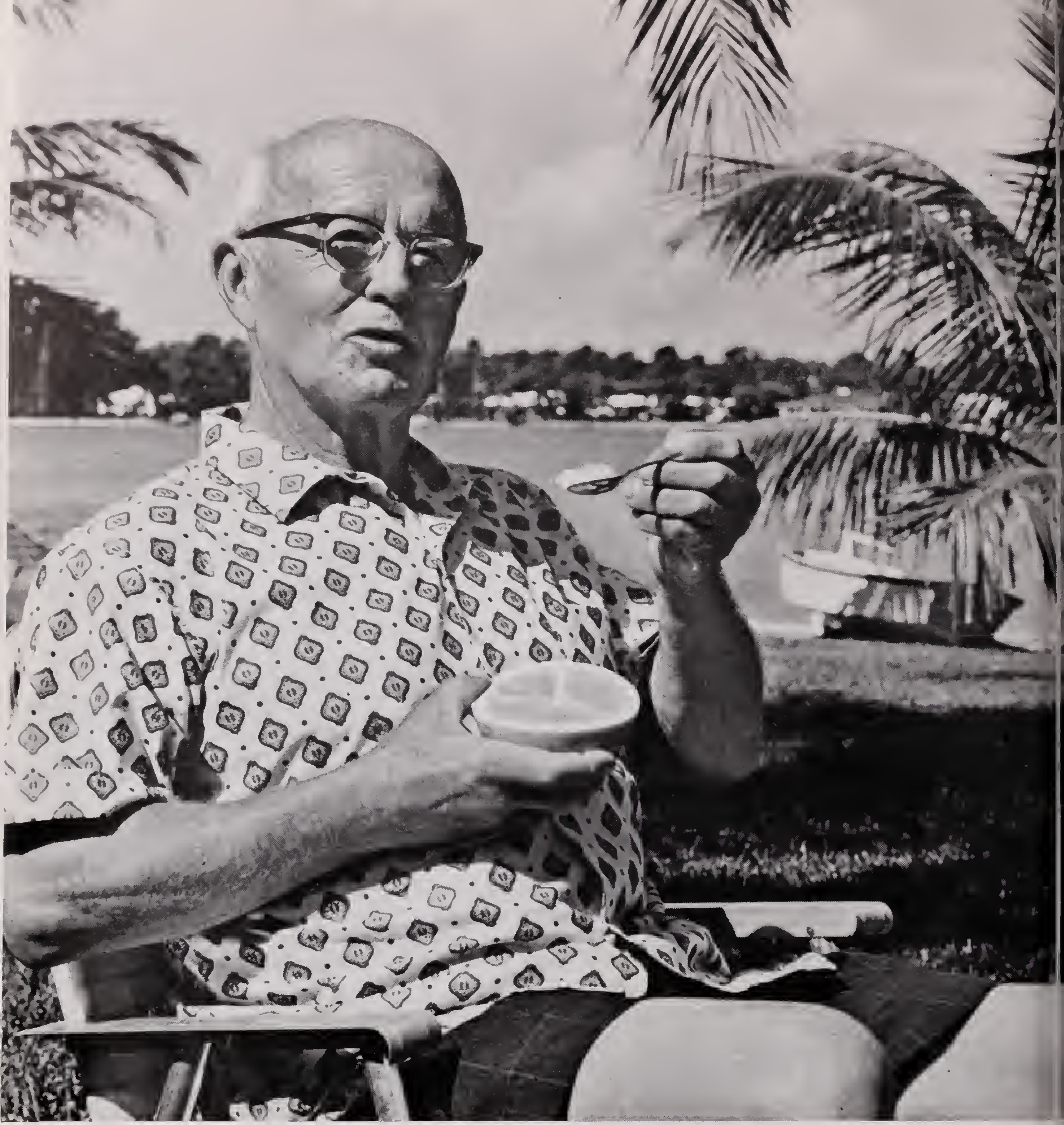
Supplied: Bottles of 50 light-pink, scored tablets.

Write for literature and samples.

▲Deprol▲®

WALLACE LABORATORIES
Cranbury, N. J.

CD-7393



The good life–just what the doctor ordered

Sea and sun are both in his doctor's orders – so is that grapefruit he's eating with such gusto. Citrus fruit is a wonderful way for this patient or any patient to get his daily quota of vitamin C . . . to enjoy something good to eat, tasty and satisfying but not rich.

Not all patients are so lucky as to have retired to Florida, where they can just reach out to pick citrus fruit off their own orange and grapefruit trees. But any patient anywhere can get the same benefits of the natural vitamin C in Florida oranges, grapefruit, and tangerines . . . thanks to modern methods of processing fresh fruit. Whether it is frozen, canned, or in cartons, 98% of the vitamin C content of the fruit is preserved.

Grapefruit and other citrus fruits filled with vitamin C are valuable in the nutrition of every age group. Among the teen-agers, vitamin C is one of the two nutrients most often low in the diet. Infants, too, need generous amounts of vitamin C; and they will take it readil when it comes to them in the form c delicious orange juice.

When your patient chooses *Floria* citrus, he can be sure of getting fruit fille with natural goodness and of just th right sweetness. Florida citrus is une celled because a State commissio watches over the entire Florida citru crop to see that it meets the world's higl est standards for fresh, frozen, canne or cartoned citrus fruits or juices.

© Florida Citrus Commission, Lakeland, Florida

NEW!

DECHOLIN-BB®

COUNTERACTS 3 COMMON CAUSES in functional G.I. disturbances related to hepatobiliary dysfunction

TENSION

butabarbital sodium
(Warning: may be habit-forming)
15 mg. (¼ gr.)

SPASM

belladonna extract
10 mg. (⅙ gr.)

STASIS

dehydrocholic acid, AMES
250 mg. (3¾ gr.)

Available: Bottles of 100 tablets.

for **spasm** and **stasis**

DECHOLIN® WITH BELLADONNA

belladonna extract, 10 mg. (⅙ gr.)
dehydrocholic acid, AMES, 250 mg. (3¾ gr.)

for **stasis** alone

DECHOLIN®

dehydrocholic acid, AMES, 250 mg. (3¾ gr.)

Available: Bottles of 100 and 500 tablets.

Average Adult Dose—DECHOLIN-BB, DECHOLIN with Belladonna, and DECHOLIN—1 or, if necessary, 2 tablets three times daily.
Contraindications: Biliary tract obstruction, acute hepatitis, and (DECHOLIN with Belladonna and DECHOLIN-BB) glaucoma or prostatic hypertrophy. 19562

AMES
COMPANY, INC
Elkhart • Indiana
Toronto • Canada

INSURANCE FOR THE DOCTOR

Russell, Marsh & Kennedy, Inc.
(*formerly Hufty, Eubank & Russell, Inc.*)

WILLIAM G. RUSSELL
President

1832 M Street, N.W.
Tel. FEderal 8-7600

PROFESSIONAL LIABILITY*
OFFICE PUBLIC LIABILITY
LOW COST TERM LIFE INSURANCE

Also:

EMPLOYEES WORKMEN'S COMPENSATION
EQUIPMENT FLOATER
FIRE INSURANCE CONTENTS
BUSINESS EXPENSE DISABILITY
BONDS ON EMPLOYEES
AUTOMOBILE INSURANCE
ANNUITIES—FIXED & VARIABLE
NON-CAN DISABILITY INCOME
PENSION PLANS FOR DOCTORS
PENSION PLANS FOR EMPLOYEES

* Endorsed by The Medical Society of the District of Columbia

Coca-Cola, too, is compatible with a well balanced diet. As a pure, wholesome drink, it provides a bit of quick energy . . . brings you back refreshed after work or play. It contributes to good health by providing a pleasurable moment's pause from the pace of a busy day.

DRINK
Coca-Cola
TRADE-MARK ®

THIS IS THE COLOR OF PROTECTION

BETADINE—The only germicide whose color indicates a germ-free environment—provides lasting protection and is the most potent non-irritating topical antiseptic known.

for the first time...
a universal microbicidal agent
that does not sensitize
or retard healing

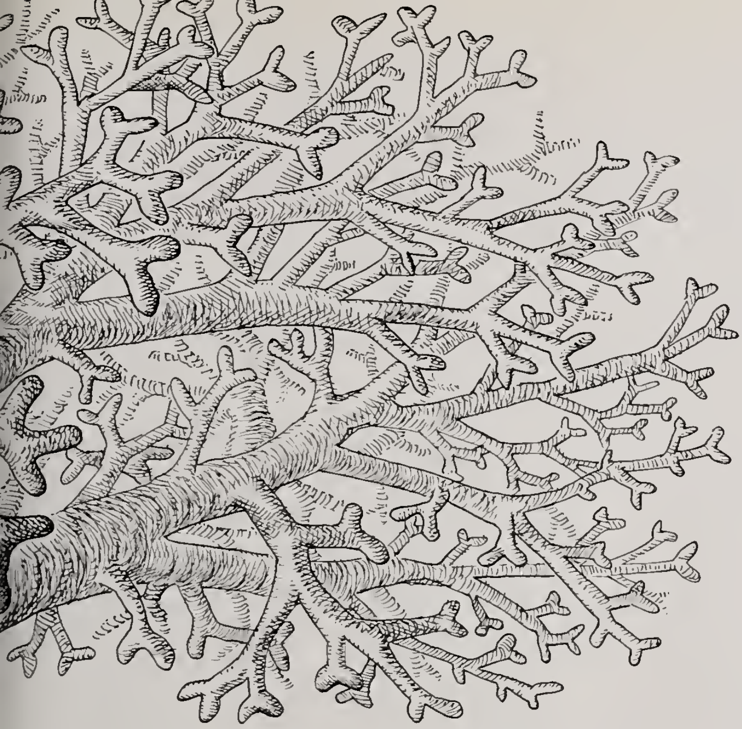
Betadine®
Povidone-Iodine NND

Kills bacteria, viruses, fungi, yeasts and protozoa on contact. Non-injurious to skin, exposed tissue or mucous membranes.

Products available: Betadine Solution • Betadine Aerosol Spray • Betadine Vaginal Douche • Betadine Vaginal Gel • Betadine Shampoo • Betadine Ointment • Betadine Swab Aids • Betadine Surgical Scrub •

PHYSICIANS PRODUCTS CO., INC.
PETERSBURG, VIRGINIA

gratifying
relief
in bronchial
asthma



unsurpassed for total patient benefits

Aristocort®

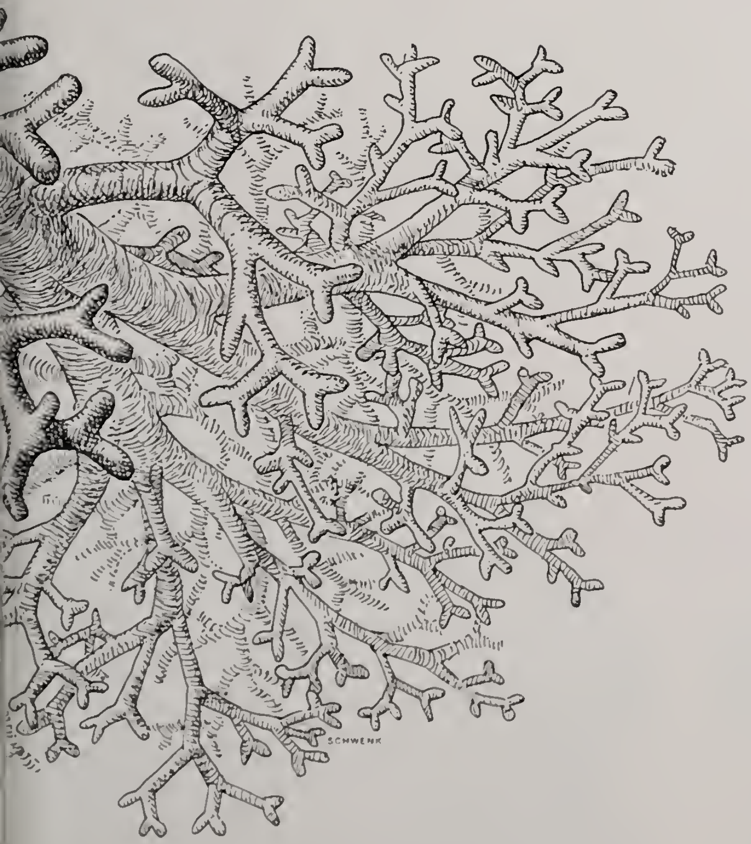
Triamcinolone Lederle

With ARISTOCORT, asthmatic patients obtain sustained relief of wheezing, dyspnea, and spasmodic coughing. It is of particular value in ameliorating severe attacks that may have serious sequelae. With ARISTOCORT, many patients who might otherwise be invalids are able to continue their customary livelihoods or maintain their regular household activities. Yet this symptomatic relief is not often accompanied by the hormonal collateral effects —sodium retention, edema, emotional disturbance, insomnia, voracious appetite— that so often have been a deterrent to steroid therapy.

SUPPLIED: Scored tablets (three strengths), syrup and parenteral. Request complete information on indications, dosage, precautions and contraindications from your Lederle representative, or write to Medical Advisory Department.

Lederle

LEDERLE LABORATORIES
A Division of
American Cyanamid Company
Pearl River, New York



MEDICAL ANNALS

OF THE DISTRICT OF COLUMBIA

Editorial and Business Offices: 1718 M Street, N.W., Washington 6, D. C.

Editor

Wallace M. Yater, M.D.

Managing Editor

George W. Cooley

Assistant Editor

A. Louise Eckburg

EDITORIAL BOARD

Frederic G. Burke, M.D.
I. Phillips Frohman, M.D.
Winfred Overholser, M.D.
Thomas M. Peery, M.D.
Herbert P. Ramsey, M.D.
George E. Schreiner, M.D.
Donald Stubbs, M.D.
Charles Stanley White, M.D.

CONSULTING EDITORS

Irving B. Brick, M.D.
Professor of Medicine,
Georgetown University School of Medicine

Captain Thomas E. Cone, Jr., MC, USN
Chief, Pediatric Service, United States Naval Hospital

W. Montague Cobb, M.D.
Professor of Anatomy
Howard University College of Medicine

Vernon Knight, M.D.
Clinical Director, National Institute of Allergy and Infectious Diseases, National Institutes of Health

Walter Kurland, M.D.
Admitting-Personnel Physician.
Veterans Administration Hospital

Colonel Conn L. Milburn, Jr., MC, USA
Director, Walter Reed Army Institute of Research, Walter Reed Army Medical Center

Alvin E. Parrish, M.D.
Associate Professor of Medicine, and Associate Dean,
George Washington University School of Medicine

Colonel Frank M. Townsend, MC, USAF
Director, Armed Forces Institute of Pathology

THE MEDICAL SOCIETY OF THE DISTRICT OF COLUMBIA

1962

OFFICERS

J. Spencer Dryden, *President*
Karl C. Corley, *President-elect*
Frank S. Pellegrini, *First Vice President*
Naomi M. Kanof, *Second Vice President*
Mr. George W. Cooley, *Secretary-Treasurer*

EXECUTIVE BOARD

James W. Watts, *Chairman, term expires 1962*
W. LeRoy Dunn, *term expires 1963*
Victor R. Alfaro, *term expires 1964*
Duane C. Richtmeyer, *term expires 1965*

Ex Officiis

J. Spencer Dryden
Raymond T. Holden
Karl C. Corley
Mr. George W. Cooley, *Secretary*

BOARD OF CREDENTIALS

Edward W. Nicklas, *Chairman, term expires 1962*
William A. Howell, *term expires 1963*
Luther W. Gray, *term expires 1964*

DELEGATES

American Medical Association

Raymond T. Holden
C. Willard Camalier, Jr.
Clifton R. Gruver, *Alternate*
Thomas M. Peery, *Alternate*

LEGAL COUNSEL

Warren E. Magee

For your elderly patients...

an effective GERIATRIC antiarthritic with distinctive Safety Factors

When arthritis afflicts the elderly, it often poses a critical problem in the choice of an effective antiarthritic that will not aggravate other common geriatric conditions . . . such as osteoporosis, hypertension, edema, hyperglycemia, peptic ulcer, renal, cardiac or hepatic damage, latent chronic infection, or emotional instability

Pabalate-SF, the geriatric antiarthritic, is specially indicated for such patients.

As Ford and Blanchard have reported,[1] Pabalate-SF has "a pronounced antirheumatic effect in the majority of patients with degenerative joint diseases." It produces "a more uniformly sustained [salicylate blood] level for prolonged analgesia and, therefore, is superior to aspirin in the treatment of chronic rheumatic disorders."

Yet Pabalate-SF is marked by distinctive **safety factors: its potassium salts cannot contribute to sodium retention . . . its enteric coating assures gastric tolerance . . . and its clinical record reflects none of the serious reactions frequently precipitated by therapy with corticosteroids or pyrazolone derivatives. It has no contraindications except personal idiosyncrasy.**

[1] Ford, R A., and Blanchard, K: Journal-Lancet 78:185, 1958

Formula: In each persian-rose enteric-coated tablet: potassium salicylate 0.3 Gm., potassium para-aminobenzoate 0.3 Gm., ascorbic acid 50.0 mg

Also available:

PABALATE, when sodium salts are permissible.

PABALATE-HC, for conservative steroid therapy.

A. H. ROBINS CO., INC. • Richmond, Virginia

Robins

Pabalate®-SF

—the new, convenient way to prescribe **PABALATE-SODIUM FREE**

arthritis — and osteoporosis
arthritis — and hypertension
arthritis — and hyperglycemia
arthritis — and cardiac insufficiency

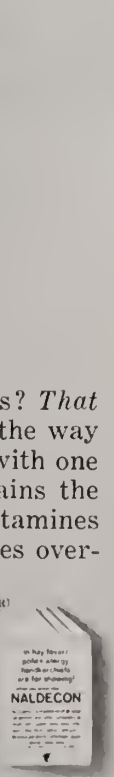
Whatever happened to handkerchiefs?

Remember when handkerchiefs were used for stuffy or runny noses? *That was before Naldecon.* Naldecon lets your head-cold patient breathe the way he should. Through the nose. Honest relief that lasts up to 8 hours with one sustained-action tablet. (When you need it, even *half* a tablet retains the sustained-action feature.) The counterbalance between *two* antihistamines and *two* decongestants* usually gives excellent results—seldom causes overstimulation or sedation. Keep handkerchiefs for showing. Prescribe Naldecon.

*Each tablet contains phenylephrine HCl 10 mg., phenylpropanolamine HCl 40 mg., phenyltoloxamine citrate 15 mg., chlorpheniramine maleate 5 mg.—half in the outer layer, half in the sustained-action core. Each teaspoonful (5 cc.) of Naldecon Syrup contains the equivalent of one-half tablet.

NALDECON®
long-acting nasal decongestant/
antihistamine

BRISTOL LABORATORIES
Div. of Bristol-Myers Co.
Syracuse, New York

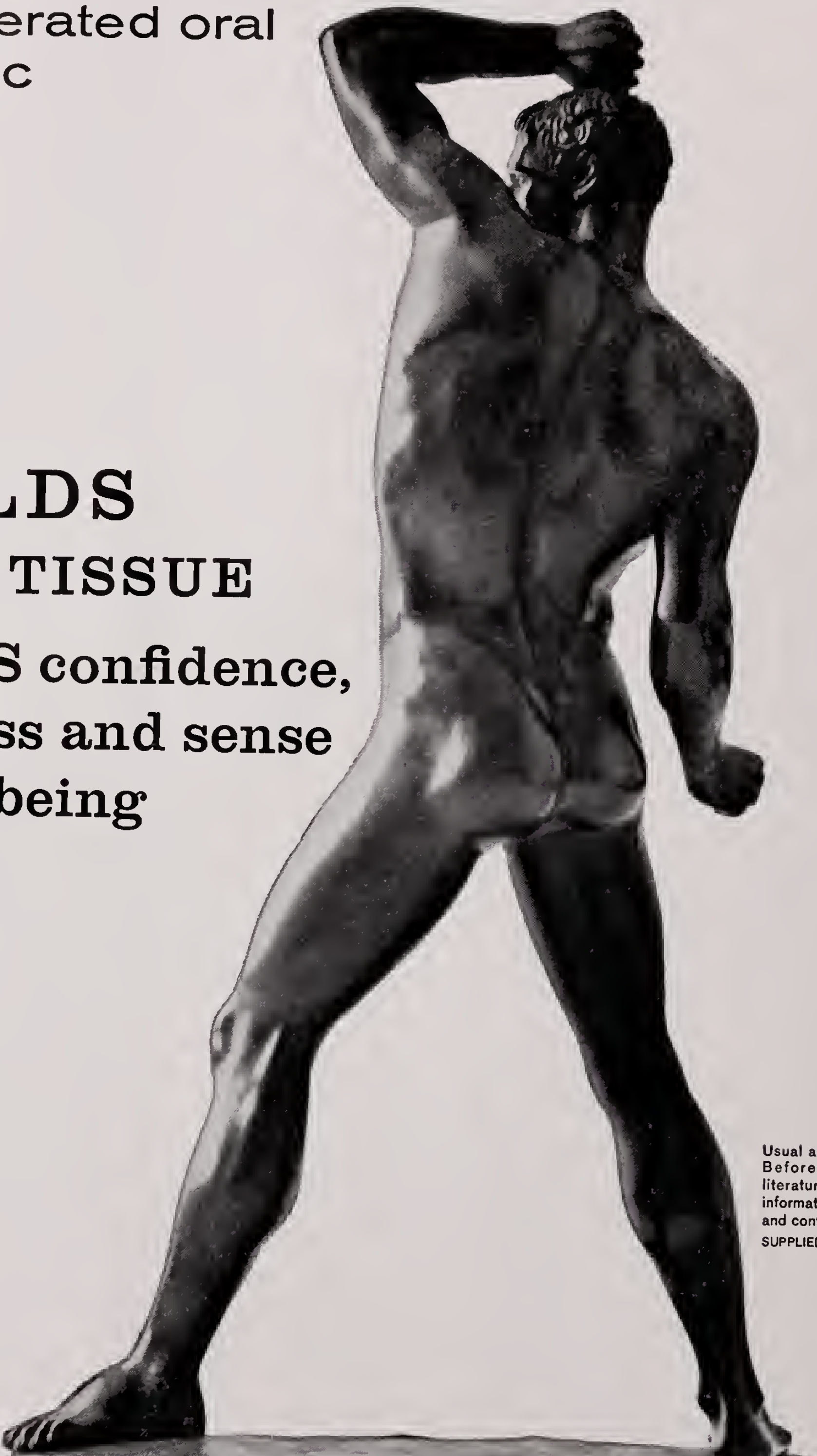


THE SIGNIFICANT NEW PHYSIOTONIC

WINSTROL®

BRAND OF STANOZOL

well tolerated oral anabolic



BUILDS

BODY TISSUE

BUILDS confidence, alertness and sense of well-being

Usual adult dose: 1 tablet t.i
Before prescribing, cons
literature for additional dosa
information, possible side effe
and contraindications.

SUPPLIED: 2 mg. tablets. Bottles of 1

Winthrop
LABORATORIES
New York 18, N. Y.

With WINSTROL, patients look better...feel stronger—because they are stronge

ESTABLISHED 1873 WOMEN ASSISTANTS

In Washington and Suburbs

CALL COLUMBIA 5-7023
(*Six Trunk Lines*)

The S. H. Hines Company

Funeral Home

2901-03-05-07 FOURTEENTH STREET N.W.
Northeast corner Harvard and 14th Streets

W. R. FRANK HINES
President and General Manager

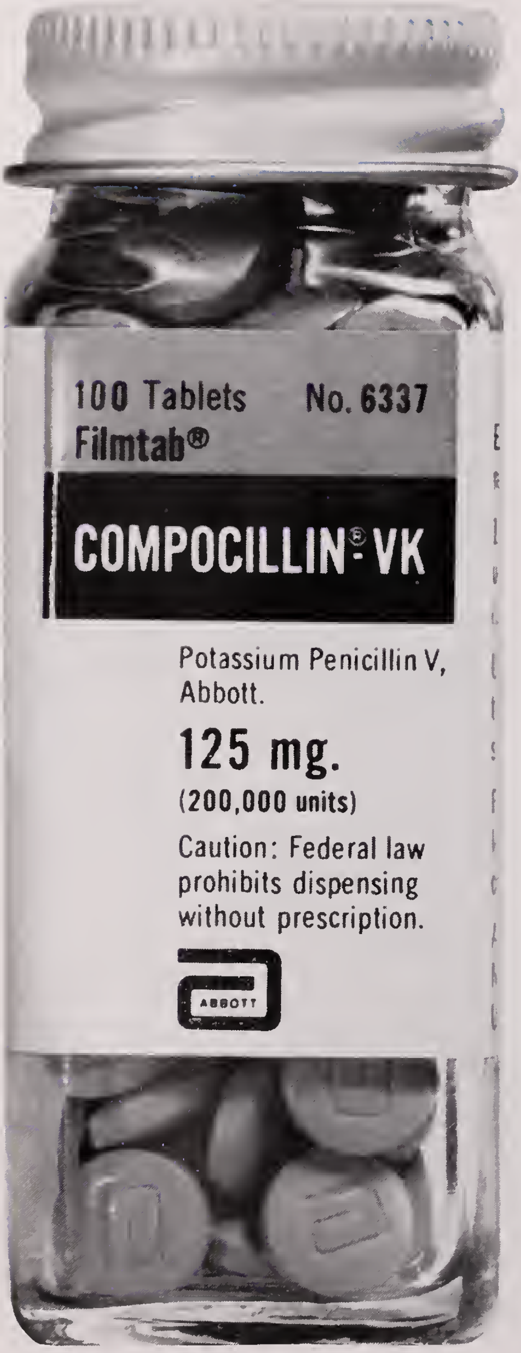
MODERN AIR-CONDITIONED ROOMS WITH CHAPEL, PIPE ORGAN AND REPOSING ROOMS ARRANGED TO MEET EVERY REQUIREMENT AT NO ADDITIONAL CHARGE. CREMATIONS.

No forfeiture of VETERAN'S BURIAL ALLOWANCE
THE EXPENSE IS A MATTER OF YOUR OWN DESIRE

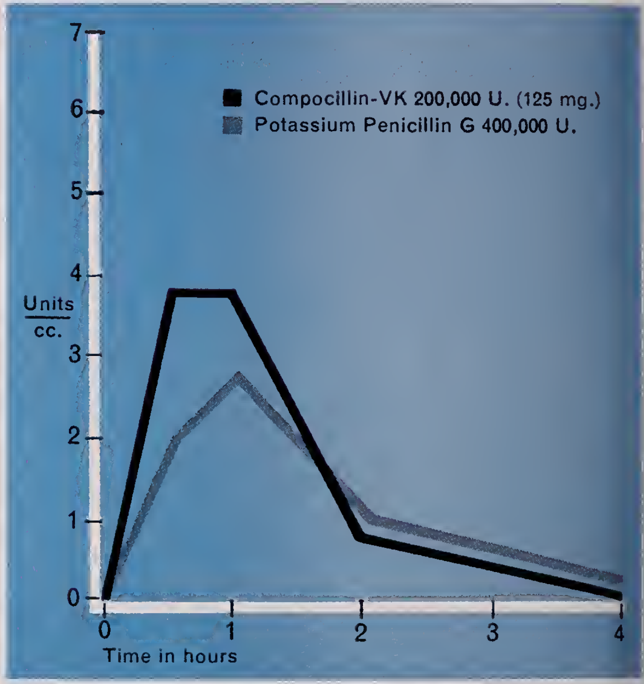
No Branch Establishments
Convenient parking facilities adjoining Funeral Home

Here's a penicillin that gives you...

PATIENT ECONOMY WHEN YOU WANT IT


100 Tablets
No. 6337
Filmtab®
COMPOCILLIN®-VK
Potassium Penicillin V, Abbott.
125 mg.
(200,000 units)
Caution: Federal law prohibits dispensing without prescription.
ABBOTT

Single Oral Doses to Fasting Subjects*



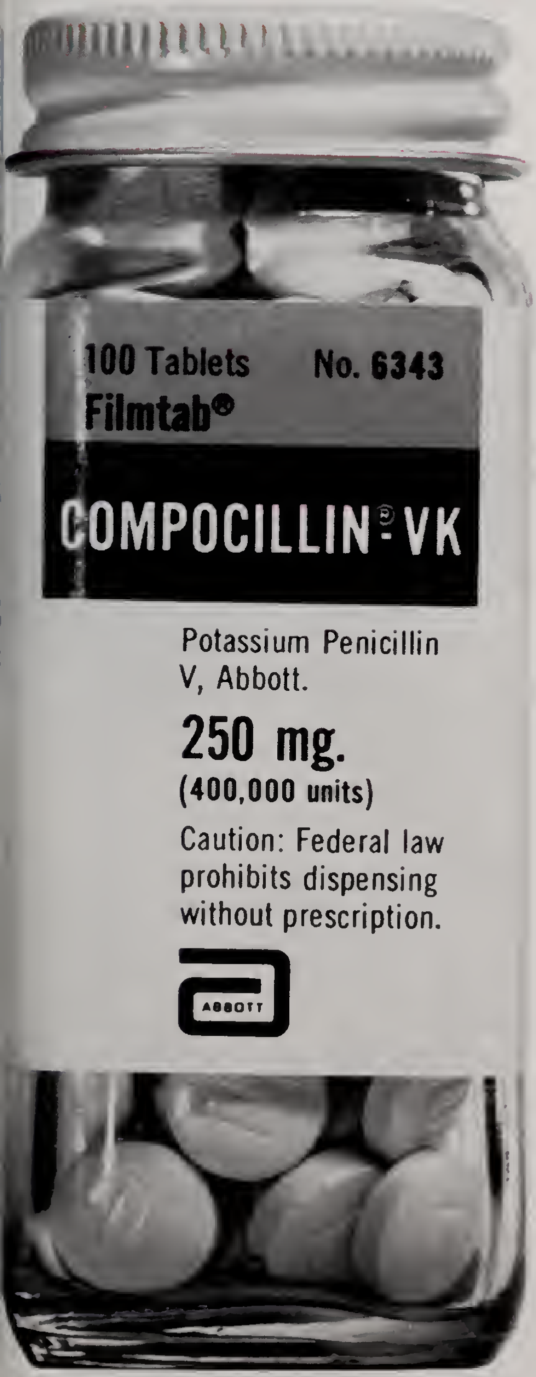
Consider milder bacterial infections

An example might be a respiratory infection. Here economy could be a definite factor in your thinking. In the chart above, you'll see that 200,000 units (125 mg.) of Compocillin VK produces blood levels at least equal to those obtained with 400,000 units of oral penicillin G potassium. This means that in less severe infections, Compocillin-VK may be given at *half* the dosage needed with oral penicillin G—with no sacrifice in blood levels. In these cases, the cost of Compocillin-VK therapy will be no more—and often will be less—than treatment with oral penicillin G.

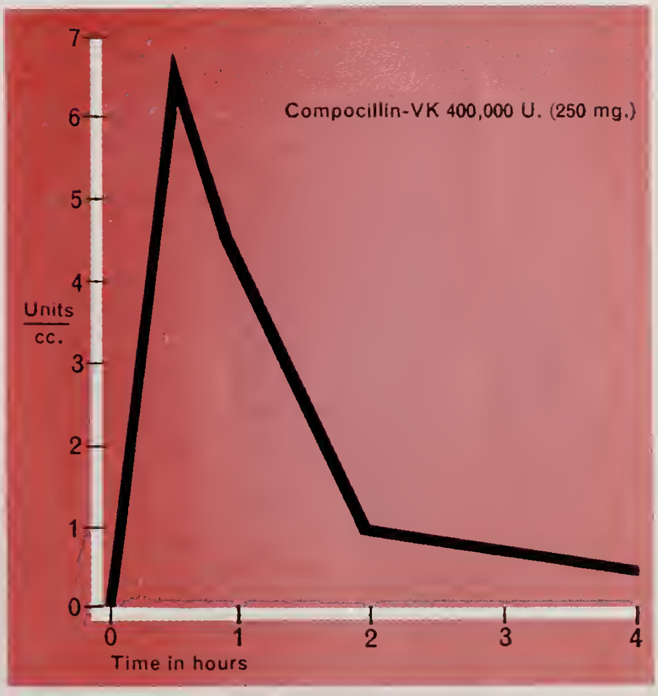
Compocillin-VK—the original potassium penicillin V • In Filmtab (125 and 250 mg.) and cherry-flavored Granules for Oral Suspension

Filmtab—Film-sealed tablets, Abbott; U.S. Pat. No. 2,881,085

PEAK EFFICIENCY WHEN YOU NEED IT


100 Tablets
No. 6343
Filmtab®
COMPOCILLIN®-VK
Potassium Penicillin V, Abbott.
250 mg.
(400,000 units)
Caution: Federal law prohibits dispensing without prescription.
ABBOTT

Single Oral Doses to Fasting Subjects*



Then, for severe infections...

. . . where your primary concern is high peak serum concentrations, you can prescribe Compocillin-VK at *full therapeutic dosage* and get the maximum antibacterial activity possible with an oral penicillin. The chart above shows the rapid peak blood levels obtained with 400,000 units (250 mg.) of Compocillin-VK. Actually, these peaks occur faster—and are higher—than those obtained with intramuscular penicillin G. Indeed, Compocillin-VK has been used in cases previously reserved for parenteral treatment. The safety advantage (oral vs. injectable) goes without saying.

*Chart data from two separate studies completed by the Microbiologic and Medical Departments of Abbott Laboratories.

ABBOTT LABORATORIES NORTH CHICAGO, ILLINOIS

210274

BOOK REVIEWS

Primer of Clinical Measurement of Blood Pressure. George E. Burch, M.D., and Nicholas P. DePasquale, M.D. Price $5.50. Pp. 141, illustrated. St. Louis: Mosby, 1962.

Dr. George E. Burch has written another in his group of "Primers," this one in collaboration with Dr. Nicholas P. DePasquale. Like the preceding volumes, this one deals with its subject in a most elementary way and should have its greatest appeal to second and third year medical students gaining their first experience in physical diagnosis.

As its title indicates, the book is limited to a discussion of the clinical or bedside measurement of blood pressure. Although there is a brief chapter on the physiology of arterial pressure, the general emphasis is upon the proper technique of recording pressure, with an evaluation of environmental factors which influence pressure levels and an enumeration of pitfalls leading to error. There is a conservative presentation of the concept of "normal" blood pressure. A brief closing chapter deals with diagnostic applications of blood pressure measurements in the detection of coarctation of the aorta, pheochromocytoma, etc. The final statement of the book, an admonition to avoid careless technique in acquiring blood pressure data, will lose much of its punch for those with a sharp eye for solecism.

Although references are sprinkled rather lightly through the text, the authors have appended a useful bibliography with its time-saving subdivision of titles into categories by subject.

The recent graduate, and even the experienced practitioner, will derive value from reading this slim volume (an effort which might be accomplished easily in a single, uninterrupted evening). However, its cost will undoubtedly induce many readers to borrow rather than buy. In the opinion of this reviewer, it is just this type of medical monograph which deserves wider dissemination through the low-cost medium of paper back publishing.

M. G. Criscitiello, M.D.

Mayo Clinic Diet Manual, 3rd ed. The Committee on Dietetics of the Mayo Clinic. Price, paper, $5.50. Pp. 222. Philadelphia: Saunders, 1961.

This is a manual for handy reference for technically trained people who are working with prescription-type diets in a hospital setting. It shows thought and planning; individuality of effort is also apparent.

One cannot help but be impressed with several basic characteristics of the manual. It contains chapters or sections devoted to 21 different types of hospital diets, each with an informative introduction. Its Appendix is 37 pages in length and contains tables of reference for both foods and people. The Index is useful and seems complete.

Attempts have been made to use a few standard references and to modernize these. Some of the Tabulations are disappointing, e.g., the section on Allergy Diets.

It is my opinion that this manual has a place in the library of the physician who is particularly concerned about the general or specific nutritional state of his patient.

Clifton R. Brooks, M.D.

Surgery of the Chest. Edited by John H. Gibbon, Jr., M.D., with the collaboration of 35 authorities. Price, $27.00. Pp. 902, illustrated. Philadelphia: Saunders, 1962.

This book is conveniently divided into 32 chapters, encompassing the entire field of thoracic and cardiovascular surgery. These chapters are written by well-recognized specialists and serve as an excellent medium for reference or instruction. The chapters, broken down in accepted fashion, describe the various aspects of a particular subject. For instance, the section on the diaphragm, as described by Mr. Phillip R. Allison, contains a breakdown as to historical background, the anatomy, the various types of hernias traversing the diaphragm, the symptomatology, medical and, finally, surgical treatment. The chapter is profusely illustrated with excellent roentgenograms and line drawings. It is representative of the excellent chapters which appear throughout the book. The descriptions of the more recently developed cardiovascular procedures are quite current and serve to be informative as well as instructive.

With regard to many of the illustrations and sketches, Dr. Frederick Coller has stated, "Pictures don't bleed." This may be so; however, the illustrations in this book come closest to bleeding that the reviewer has ever seen.

John M. Keshishian, M.D.

Strabismus: Symposium of the New Orleans Academy of Ophthalmology. Edited by George M. Haik, M.D. Price, $18.00. Pp. 369, with 202 illustrations. St. Louis: Mosby, 1962.

This excellent book reports the annual meeting of the New Orleans Academy of Ophthalmology. It contains 14 prepared papers by expert panelists, each covering a phase of strabismus. Attempts are made to present the most modern concepts of the neuroanatomy, physiology,

(*Continued on page 28*)

SAUNDERS BOOKS

Valuable to the Physician

New—Ready in January!

Schmeisser—A Clinical Manual of Orthopedic Traction Techniques

Every general physician encountering and treating fractures will welcome this handy little manual. Dr. Schmeisser clearly describes and illustrates the way in which traction should be applied in the management of most common fractures. He explains various principles involved in each orthopedic situation and then shows exactly how weights and pulleys should be distributed to achieve optimal results. Contents embrace such topics as: *Pelvis sling for fractures of the pelvis*—Head halter for relief of neck pain or temporary immobilization of cervical fracture or dislocation—*Bryant's traction for a fractured femur in a child 1-3 years old*—Insertion of Kirschner wires and Steinmann pins—*Skeletal traction through proximal femur for central fracture dislocation of the hip*—Cervical traction by skull tongs.

By GERHARD SCHMEISSER, JR., M.D., Chief of Orthopedic Surgery, Baltimore City Hospitals, Assistant Professor of Orthopedic Surgery, Johns Hopkins University School of Medicine. About 60 pages, 7¼" x 10¼", 50 illustrations. About $5.00. *New—Ready in January!*

New (9th) Edition!

Wechsler—Clinical Neurology

Ready in January! Specific, usable information on virtually every clinical neurologic problem and its diagnosis and management. This *New (9th) Edition,* continuing a 35-year tradition of clarity and completeness, incorporates all the newest advances in understanding of the mechanisms and symptoms of neurologic disease. Dr. Wechsler tells you what questions to ask in the neurologic examination and how to elicit the most meaningful responses. He tells you what signs to look for and how. He investigates the implications of each symptom and shows you how to follow it up. Coverage ranges from *handling facial tics* to *managing complex tumors of the brain.* Chapters on *Neurosyphilis* and the *Psychologic Diagnosis* have been completely rewritten for this edition. Recent contributions of the biochemist and pharmacologist are interwoven throughout the text according to their clinical pertinence. *A valuable clinical guide for every physician seeing neurologic disorders.*

By ISRAEL WECHSLER, M.D., Consulting Neurologist, The Mount Sinai Hospital, New York. About 752 pages, 6½" x 9¼", with 179 figures. About $12.50. *New (9th) Edition—Ready in January!*

New—Ready in January!

Warren—Surgery

An Integrated and Cohesive Presentation of the Principles of Surgery

This monumental new volume was produced by 24 members of the Harvard Surgical Faculty, under the skilled leadership of Dr. Richard Warren.

Emphasizing today's principles of surgical disease rather than mere mechanical techniques, it encompasses the entire spectrum of surgery. It offers an amazing unity of theme and development rarely achieved in a multi-author volume. Every effort has been made to give a clear understanding of the nature of the surgical problem and the rationale of its clinical management. You will welcome the sustained emphasis on the natural history of surgical disease and the mechanisms that produce symptoms. Indications are shown for exactly *when, how* and *why* surgical intervention may be called for in the course of a disorder.

The first portion of the text concentrates on the fundamentals of surgery not limited to specific areas of the body *(wound healing, hemorrhage, trauma, infection, tumors, burns, anesthesia).* The remaining 24 chapters, the major part of the book, deal with various disease entities amenable to surgical treatment. Every area of the body is covered—from *the brain and the spinal cord* to *the arteries, veins and lymphatics.*

An outstanding coordinative feature of this work is the liberal use of crystal-clear illustrations all drawn by a single artist, *Janis Cirulis.* This is a volume that every practitioner will want on his shelf as an excellent reference on the principles of modern surgery.

By RICHARD WARREN, M.D., in Collaboration with 23 Other Members of the Department of Surgery, Harvard Medical School. About 1377 pages, 7" x 10", with about 511 illustrations. About $19.00. *New—Ready in January!*

To Order Mail Coupon Below!

W. B. SAUNDERS COMPANY
West Washington Square Philadelphia 5

Please send when ready and bill me:

☐ Warren's Surgery, about $19.00.

☐ Schmeisser's Orthopedic Traction Techniques, about $5.00.

☐ Wechsler's Clinical Neurology, about $12.50.

Name..

Address..

....SJG 12-62

Book Reviews

(*Continued from page 26*)

and neurology of the extraocular muscles. The common anomalies of esotropia, exotropia, and hypertropia are also well covered. Newer and more controversial areas in this field, the A and V syndromes, pleoptics, and the accommodative-convergence—accommodation ratio, are given special consideration.

The book is well illustrated and each chapter is followed by a bibliography. The student in ophthalmology will be interested in the entire book for study and reference. The practicing ophthalmologist will find much of value also in the unrehearsed question-and-answer round-table discussions at the end.

Every library associated with an institution embodying the visual sciences, clinical or research, should have this authoritative book.

J. H. King, Jr., M.D., F.A.C.S.

Synopsis of Obstetrics, 6th ed. Charles E. McLennan, M.D. Price, $6.75. Pp. 464, with 157 illustrations, including 4 in color. St. Louis: Mosby, 1962.

Reading this book brought back many memories to me. I am sure that many of us recall carrying our "Litzenbergs" when we were in school. This is a revision of Dr. Litzenberg's original synopsis.

The original Synopsis of Obstetrics was an illustrated expansion of Dr. Litzenberg's lecture notes. The present edition has been rearranged into a more logical sequence and much related subject matter has been merged; e.g., the various abnormal labor mechanisms have been combined into a single chapter. Considerable outmoded material has been deleted and many new sections added.

This book is a handbook and is not designed for the obstetrical specialist, although even he may use it for quick review. I think that those who do obstetrics occasionally or deal with pregnancy in other ways would find the book of value for review and for refreshing the memory. It is concise, well written, and illustrated, and is very easy to read.

Joseph M. O'Neil, M.D.

Essentials of Pediatric Psychiatry. Ruben Meyer, M.D., Morton Levitt, Ph.D., Mordecai L. Falick, M.D., and Ben O. Rubenstein, Ph.D. Price, $6.00. Pp. 208. New York: Appleton, 1962.

This book is written for the pediatrician, and indeed the first listed author, Dr. Meyer, is Associate Professor of Pediatrics, Wayne State University College of Medicine. Dr. Levitt and Dr. Rubenstein are psychologists, and Dr. Falick is a psychiatrist and training psychoanalyst with the Psychoanalytic Training Center of Detroit. The authors are unnecessarily apologetic for limiting their format to a psychoanalytic viewpoint. To deal with essentials in a brief text requires elucidation of general and basic principles of dynamics and theory, and these certainly have their roots in psychoanalysis.

The book is well organized into seven chapters covering psychic development, normal development in infancy and childhood, emotional reactions to trauma and hospitalization, serious disorders of development, brain-damaged and mentally defective children, and diagnosis and treatment. The clinical illustrations ("capsules," as they are called) will remind any pediatrician of his own practice, and the discussion of management stresses tactful and practical methods. The chapter on the brain-damaged and retarded child is especially good in its realistic presentation of the many technical and social facets incumbent upon this problem.

In two minor areas discussed in Chapter Three—Normal Development and Its Problems, I disagree with the authors: (1) The expectations of the child's normal growth and adaptive capacity seem to be pegged a trifle too high, especially with reference to toilet training and weaning, while the expectations of patience and tolerance in the parents are pegged too low. (2) Autoerotic activity (crib rocking, head bumping, masturbation, etc.) is classified by the authors as normal in infants and small children. Such activity, noticed by parents, and reported to the pediatrician, should be treated as pathologic until proved otherwise. These activities are always attempts on the part of the child to compensate for emotional deprivation and should never be dismissed from further attention with assurances that "he will grow out of it."

In the preface the authors stated: ". . . we have tried to provide a road map for the pediatrician to use in his daily activities." The book seems to fulfill this function admirably.

George W. Sprehn, M.D.

W. B. SAUNDERS COMPANY features the following recent books in their full page advertisement appearing elsewhere in this issue:

WARREN—SURGERY: Emphasizes today's principles of surgical disease rather than mere mechanical techniques.

SCHMEISSER—A CLINICAL MANUAL OF ORTHOPEDIC TRACTION TECHNIQUES: Describes advantages of traction in management of common fractures.

WECHSLER—CLINICAL NEUROLOGY: Information on diagnosis and management of every-day clinical neurologic problems.

Trocinate® Brand of Thiphenamil HCl.

FOR DIVERTICULITIS, MUCUS COLITIS,
IRRITATIVE DIARRHEA, IRRITATIVE URETERITIS,
BLADDER SPASM

Trocinate is a musculotropic antispasmodic with no appreciable anticholinergic action. It relieves spasms of the lower bowel and genito-urinary tract by direct action on the contractile mechanism of smooth muscles. The absence of any appreciable action on the autonomic nervous system eliminates the usual side-effects. It may be safely used in glaucoma. Each tablet contains 100 mgs. Trocinate HCl.

USUAL DOSAGE: 2 tablets, 4 times a day. Maintenance dosage is frequently lower.

Dispensed in bottles of 40 and 250 tablets.

WM. P. POYTHRESS & COMPANY, INC., RICHMOND, VIRGINIA
Manufacturers of ethical pharmaceuticals since 1856

CAPITAL NURSE
REGISTRY
(Est. 1910)
Undergraduate
Practical
Nurses
Recommended
by Physicians
All Nurses Have Had Hospital Training
24 Hour Telephone Service

One of Washington's outstanding
Registries, serving physicians
and surgeons since 1910

LICENSED BY DISTRICT OF COLUMBIA

Your Patronage Solicited

Telephone
RAndolph 3-2600 or 3-1771

THE
BIRTCHER MEDICAL DISTRIBUTORS
OF D. C.

Complete lines of
Physical and Hydrotherapy Equipment
Electro-Surgical Equipment
Electrocardiograph–Cardioscope–
Defibrillator and Heart Pacer

Distributors for:

PROFEXRAY X-RAY EQUIPMENT

A complete line of Radiographic and Fluoroscopic Equipment from the small Portable to 900 ma–150 KVP and superficial therapy. Also, most makes of X-ray accessories.

New and used equipment always in stock.

3314 M Street, N.W., Washington 7, D. C.
FEderal 3-2660

T. J. STRATTON
MEDICAL EQUIPMENT REPAIR SERVICE
Official factory service station for
many manufactures.

NATIONAL AND REGIONAL MEETINGS

December 26–31: American Association for the Advancement of Science. Philadelphia. Address: Dr. R. L. Taylor, 1515 Massachusetts Avenue, N.W., Washington 5, D. C.

January 19–20: American Cancer Society—National Crusade. Shoreham Hotel, Washington. Address: Mr. Louis Reitz, Convention Coördinator, 521 West 57th Street, New York, N. Y.

January 23–26: American Group Psychotherapy Association. Mayflower Hotel, Washington. Address: Miss Marilyn Schiff, Administrative Secretary, 1790 Broadway, Room 516, New York 19, N. Y.

February 6–9: American College of Radiology. Drake Hotel, Chicago. Address: Mr. William C. Stronach, *Executive Director*, 20 North Wacker Drive, Chicago, Ill.

March 6–9: American Orthopsychiatric Association, Inc. Shoreham Hotel, Washington. Address: Marion F. Langer, Executive Secretary, 1790 Broadway, New York 19, N. Y.

March 17–22: American College of Allergists. The Americana, New York. Address: Dr. D. Joseph Parsons, *Secretary*, 1405 East High Street, Springfield, Ohio.

March 18–21: Industrial Medical Association. Sheraton-Park Hotel, Washington. Address: Mr. Clark D. Bridges, Managing Director, 55 East Washington Street, Chicago 2, Ill.

March 18–21: Southeastern Surgical Congress. Americana Hotel, Miami Beach, Fla. Address: Dr. A. H. Letton, *Executive Secretary*, 340 Boulevard, N.E., Atlanta 12, Ga.

March 27–29: Annual Congress, American College of Allergists. The Americana, New York. Address: Eloi Bauers, *Executive Vice President*, 2160 Rand Tower, Minneapolis 2, Minn.

March 29–31: American Society of Internal Medicine. Brown Palace Hotel, Denver. Address: Mr. Albert V. Whitehall, *Executive Director*, 3410 Geary Blvd., San Francisco 18, Calif.

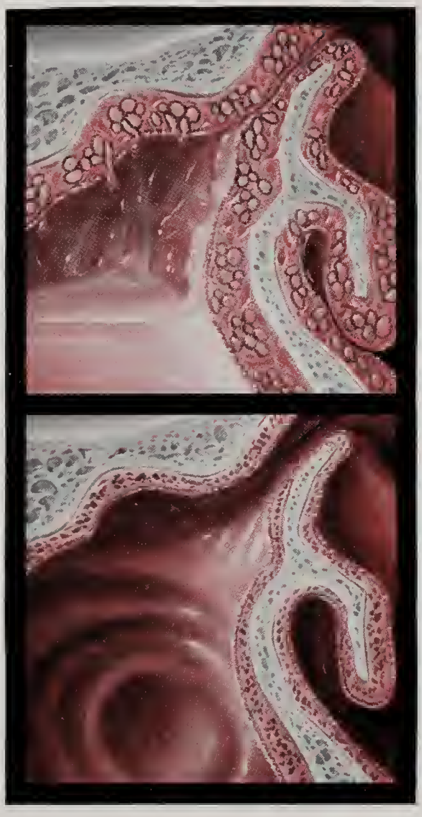
March 29–April 5: American Academy of General Practice. Chicago. Address: Mr. Mac F. Cahal, *Executive Director*, Volker Boulevard at Brookside, Kansas City 12, Mo.

April 1–5: Annual Spring Congress in Ophthalmology and Otolaryngology. Gill Memorial Eye, Ear and Throat Hospital, Roanoke, Va. Address: Superintendent, P. O. Box 1789, Roanoke, Va.

April 17–20: West Virginia Academy of Ophthalmology and Otolaryngology. Greenbrier Hotel, White Sulphur Springs, West Va. Address: Dr. Worthy W. McKinney, *Secretary*, Professional Park, Beckley, West Va.

April 21–24: 11th Annual Meeting, American College of Obstetricians and Gynecologists. Statler-Hilton Hotel, New York. Address: Craig W. Muckle, 1806 Garrett Road, Lansdowne, Pa.

In colds
and
sinusitis
unsurpassed
in providing
drainage
space
without
chemical
harm



The clogged sinus
In sinusitis, the mucous membrane becomes hyperemic and edematous, lymph glands and goblet cells hyperactive. Ostium is closed by edema and secretions cannot drain freely.

The normal sinus
Magnified anatomy of a portion of maxillary sinus showing mucous membrane with cilia and lymph glands. Ostium is normal and patent.

NEO-SYNEPHRINE®
brand of phenylephrine hydrochloride
hydrochloride

NASAL SPRAYS AND SOLUTIONS

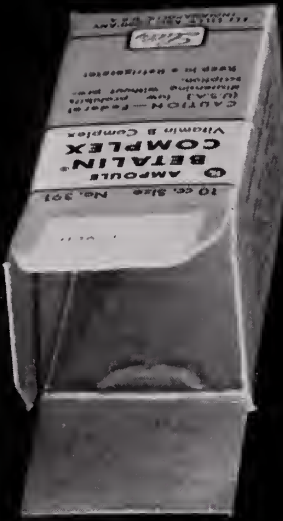
When there is nasal turgescence, tiny orifices of sinus ostia tend to clog. Neo-Synephrine nasal solutions and sprays reduce edematous tissues on contact to provide prompt relief. As turbinates shrink, obstructed sinus ostia open, drainage and breathing become freer and the boggy feeling of a cold disappears.

Delicate respiratory tissue and its natural defenses are not harmed by exceptionally bland Neo-Synephrine; systemic effects are nil; it does not sting. For years it has been recommended for prevention and treatment of sinusitis.[1-3] Repeated applications do not lessen effectiveness.

Available in plastic nasal sprays for adults (½%) and children (¼%), in dropper bottles of ⅛, ¼ or 1 per cent.

1. Grant, L. E.: Coryza and nasal sinus infections, Clin. Med. & Surg. 42:121, March, 1935. 2. Putney, F. J.: Sinus infection, in Conn, H. F. (Ed.): Current Therapy 1952, Philadelphia, W. B. Saunders Company, 1952, p. 110. 3. Simonton, K. M.: Current treatment of sinusitis, Journal-Lancet 79:535, Dec., 1959.

Winthrop LABORATORIES
New York 18, N.Y.


AMPOULE
BETALIN
COMPLEX
Vitamin B Complex
10 cc. Size No. 391
CAUTION—Federal (U.S.A.) law prohibits dispensing without prescription.
Keep in a Refrigerator

the case of the missing ampoule

People aren't perfect—neither are machines. Both can slip up occasionally. Take an ampoule in a paper carton for example. How can we be absolutely sure that the ampoule is really inside? ▪ Here's how: A machine folds the carton, inserts the ampoule, seals the carton, and then places it on the finishing line. Further down the line, the detective waits—a jet of air sweeping across the finishing line just strong enough to blow an empty carton off the belt. Properly filled cartons proceed for further inspection and packaging. ▪ Perhaps a small point, but it is another in a long series of control measures designed to deliver quality pharmaceuticals every time.

Eli Lilly and Company • Indianapolis 6, Indiana, U.S.A.

Lilly

290326

MEDICAL ANNALS
of the District of Columbia

December 1962
VOLUME XXXI • NUMBER 12

NATIONAL INSTITUTES OF HEALTH NUMBER

This is the seventh of a second series of special numbers of the MEDICAL ANNALS, the scientific material for which is supplied by medical institutions and scientific organizations in the Washington Metropolitan Area. For the NATIONAL INSTITUTES OF HEALTH NUMBER the Editorial Board is indebted to Dr. Vernon Knight, Consulting Editor of the MEDICAL ANNALS, who secured the papers which appear in this issue.

A Symposium on Cancer Chemotherapy*†

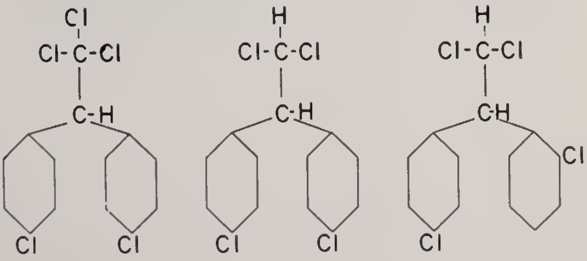
ROY HERTZ, M.D.
PAUL P. CARBONE, M.D.
EMIL FREI III, M.D.
EMIL J. FREIREICH, M.D.
MORTIMER B. LIPSETT, M.D.
Bethesda, Maryland

I. HORMONE-PRODUCING TUMORS

ROY HERTZ, M.D.

I SHOULD LIKE to report to you in very brief terms about the treatment by chemotherapeutic means of two forms of hormone-producing tumors in man, the first of which is cancer of the adrenal cortex. The degree of destruction which a compound related to the insecticide DDT (figure 1) will produce in the adrenal cortex of the dog upon chronic administration is shown in figure 2.

In the light of this selective and intensive necrotizing effect of this type of agent, we have chosen to investigate the potential therapeutic



DDT DDD p'o,DDD

FIG. 1. Formulae of DDD compounds.

---

* From the National Cancer Institute, National Institutes of Health, Public Health Service, U. S. Department of Health, Education, and Welfare, Bethesda 14, Md.

† Presented at the Combined Clinical Staff Conference at the Clinical Center on December 14, 1961.

value of this particular isomer from among a group of agents which was shown by Dr. Cueto and Dr. Brown to be especially effective in producing the adrenocorticolytic effect just shown.

In 26 patients with proven metastatic inoperable adrenal carcinoma we have studied these effects, employing this drug at a daily oral dosage of 10 Gm. per day, the duration and intensity of the treatments being adjusted in each individual case according to the patient's tolerance of the drug.

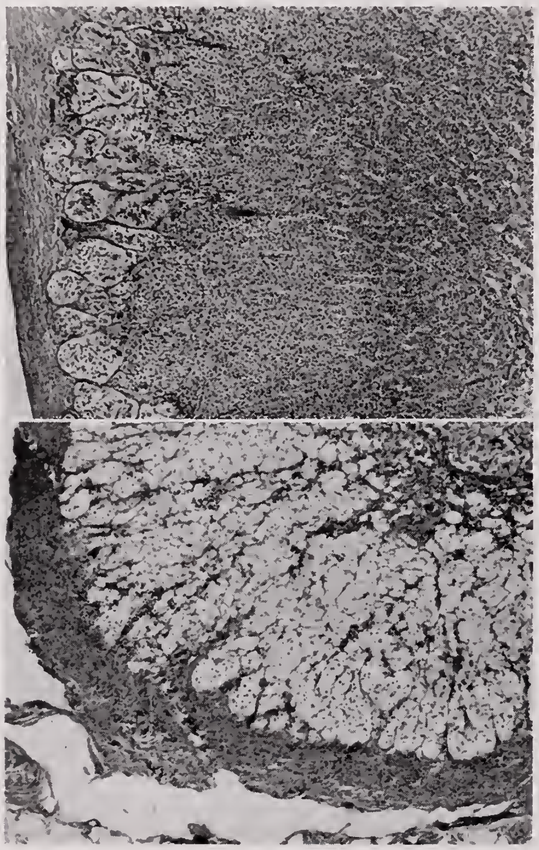


Fig. 2. Adrenal cortex of dog showing destruction caused by chronic administration of o,p′ DDD.

Figure 3-A shows the characteristic facial appearance of one of the patients, reflecting the degree of hyperadrenocorticism which frequently accompanies this extensive metastatic functional process. Noteworthy are the plethora, the hirsutism, the acne, and the rounding of the face. Associated with this in many of these cases we have seen an impairment in glucose tolerance or frank clinical diabetes, hypertension, and a significant degree of mental confusion quite similar to that which can be induced by the administration of exogenous corticoid.

Figure 3-B shows the response of this patient's facial appearance to the adrenotoxicolytic action of ortho para prime DDD administered over a protracted period of time. Associated with this change in her facial appearance there was a significant drop in her ketosteroid and corticoid excretion (figure 4) in relationship to the period of therapy, and we found that this period of protracted therapy was accompanied also by regression of a large abdominal mass and a clinical remission in the endocrine manifestations of this patient's disease.

In addition, as shown in figure 5 in the case of another patient similarly treated, we have observed regression of pulmonary metastases as well as abdominal metastases, and we can say that both on hormonal grounds and in terms of objective regression of the metastatic disease this form of therapy has highly specific and selective effects.

Table 1 presents a summary of our experience with these 26 patients. In 18 of them there was unequivocal evidence of an effect on tumor in terms of suppression of corticoid and ketosteroid excretion, and in 10 of these 18 patients there was also associated objective regression of tumor of the type I have just illustrated to you. In eight of the patients the clinical circumstances of the administration of the drug and the lack of tolerance to the drug led us to come out with no significant effect either on the hormonal or the tumor process in these patients.

TABLE 1

Adrenal Cancer Treated with o,p′ DDD

Total cases	26
Reduction in steroid excretion	18
Objective regression of tumor	10
No effect	8

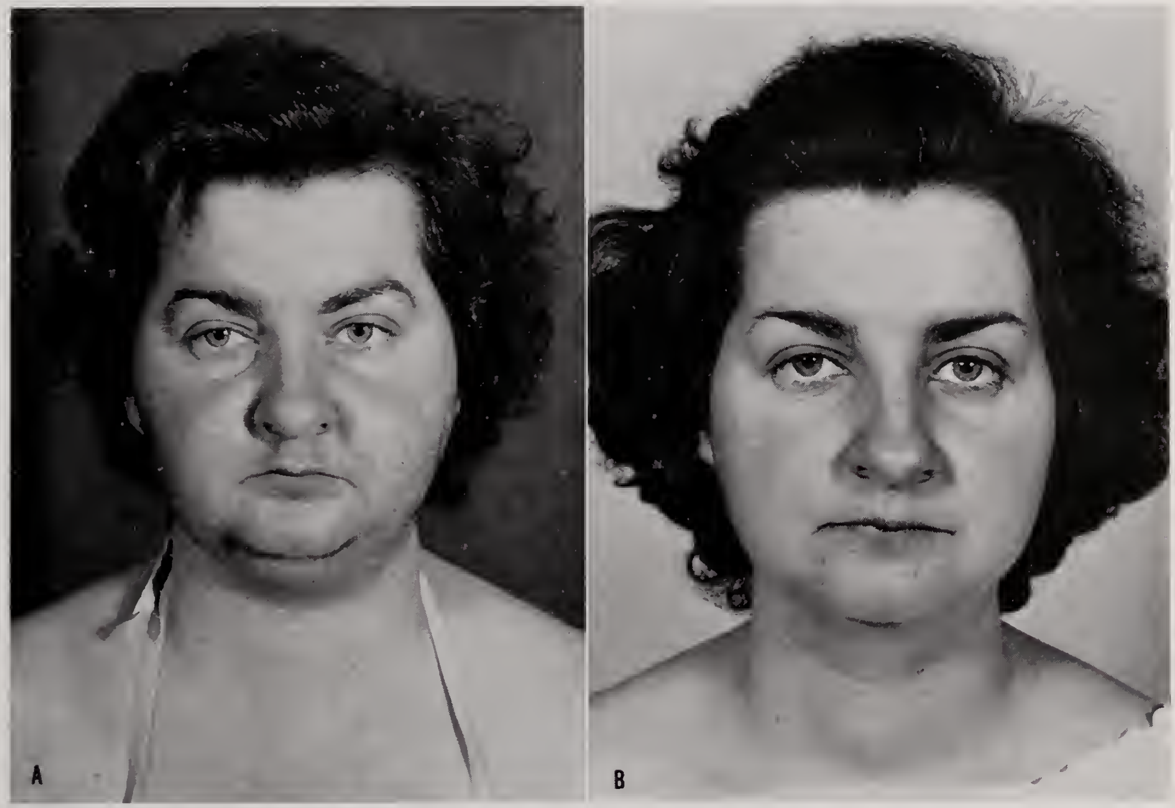


FIG. 3. (A) Patient with metastatic adrenal carcinoma before administration of o,p′ DDD; (B) after prolonged use of o,p′ DDD.

I can simply summarize by saying that it is clear that this is an effective agent in metastatic adrenocortical carcinoma. However, the cumulative toxicity of this compound, which is largely characterized by gastrointestinal intolerance associated with nausea, vomiting and profound anorexia, and also by neurotoxicity, which is associated with lethargy and somnolence and in some cases incoördination, seriously limits the practical usefulness of this agent. Therefore, in certain instances the tolerance to this agent becomes sufficiently limited so that its practical applicability is not of much consequence.

However, in some of the cases the degree of response and the maintenance of the remissions for periods varying from as short as three months to as long as three years have led us to believe that this agent is worth application in selected cases of this type and that further research in the area of the development of more effective and less toxic analogs merits our consistent attention, and we are pursuing this in the laboratory.

Another form of a hormone-producing tumor, the tumors arising from the fetal chorion which we refer to collectively as the trophoblastic tumors, is the most malignant variety, which we call choriocarcinoma. A less malignant variety is referred to as chorio-adenoma destruens, but this includes a number of subvarieties which I will not discuss.

We have used Methotrexate® as primary therapy in 63 cases coming to us over the last five years with metastatic trophoblastic disease. Of these 63 cases, 44 have been those with a histologic diagnosis of choriocarcinoma, among whom one would expect a survivorship of not more than 5 per cent, and the remaining 19 were individuals with a less malignant variety of

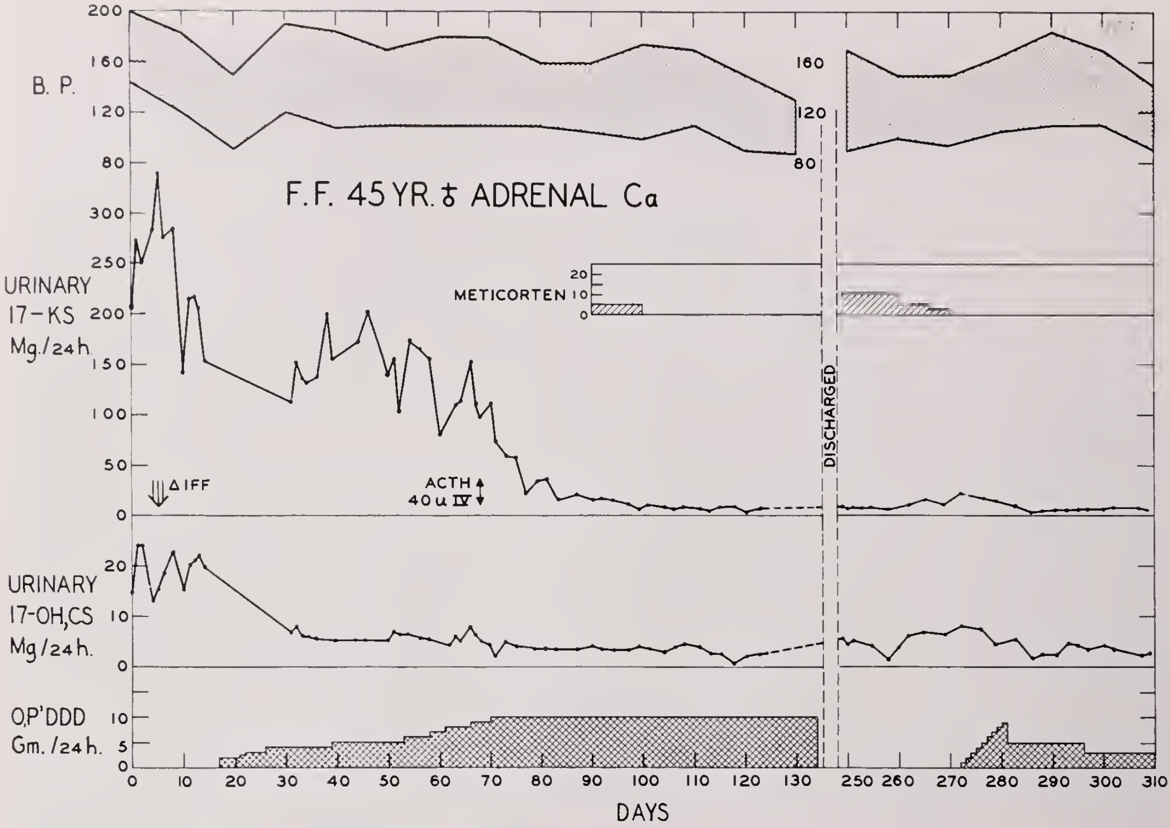


FIG. 4 Effect of o,p′ DDD in patient in figure 3 on blood pressure and urinary steroids.

trophoblastic disease in whom the expected survivorship is less clearly assessable but would be approximately 30 per cent or perhaps a little more.

These patients have all been given primary treatment according to an intensive intermittent regimen which I shall not detail here, as originally devised by Dr. M. C. Li and myself. As a form of secondary therapy in those patients who have become Methotrexate-resistant we have employed an alkaloid derived from a plant (*Vinca rosea*), the alkaloid of which is called vincaleukoblastine. It has been shown to have some pronounced oncolytic effects, about which you shall hear more later.

Figure 6 illustrates one of the more favorable types of response which we have obtained in 30 of these 63 patients with metastatic trophoblastic disease. This response we have characterized as total remission in that the chorionic gonadotropic hormone titer, which we use as the primary quantitative index of response to therapy, has after these four courses of therapy come down to within the normal range. There has been associated regression of a large pulmonary metastasis. In addition, this patient had metastasis to the scalp, metastasis to the brain and bowel, and all of these regressed completely with complete remission now for over four years.

Table 2 shows the duration of the 30 such complete remissions which we have observed, as calculated a few months ago, and several of these patients have now gone over five years and have been followed regularly in our clinic and laboratory, hormonally, radiologically, and by physical examination.

A less fortunate type of response which we have characterized as incomplete remission is seen in about half the cases of metastatic trophoblastic disease treated according to the regimen that we have devised. There is a persistence of a low but distinctly abnormal hormone level with ultimate recrudescence of the titer and reactivation of the disease and death of the patient, notwithstanding the further application of additional courses of Methotrexate therapy, so that we had evidence of Methotrexate resistance.

TABLE 2

*Duration of 30 Complete Remissions**

4 to 5 years	3
3 to 4 years	3
2 to 3 years	7
1 to 2 years	13
½ to 1 year	4

* The term "complete remission" indicates total absence of evidence of residual disease by physical, radiologic, and hormonal examination (compiled as of October 31, 1960).

This period of sustained remission during which in many cases the only clinical manifestation of persistent disease is the persistence of the hormone titer and during which most patients show a very substantial degree of clinical remission can range anywhere from the 60 days to as long as 3 years. There is great variability as to when further reactivation of the disease will be observed.

It is in this period of Methotrexate resistance that we have applied the vincaleukoblastine to 16 such patients exhibiting Methotrexate resistance, and in 5 of these we have noted further regression of the tumor as manifested by further regression of their titer or further regression of their lesions by X-ray therapy. Two of these five responsive patients have gone into total remission, now not showing evidence of recrudescence of the disease for a year and a half and a year or so, respectively.

Accordingly, it is clear that vincaleukoblastine also is an effective agent in this disease but not as uniformly and consistently as Methotrexate.

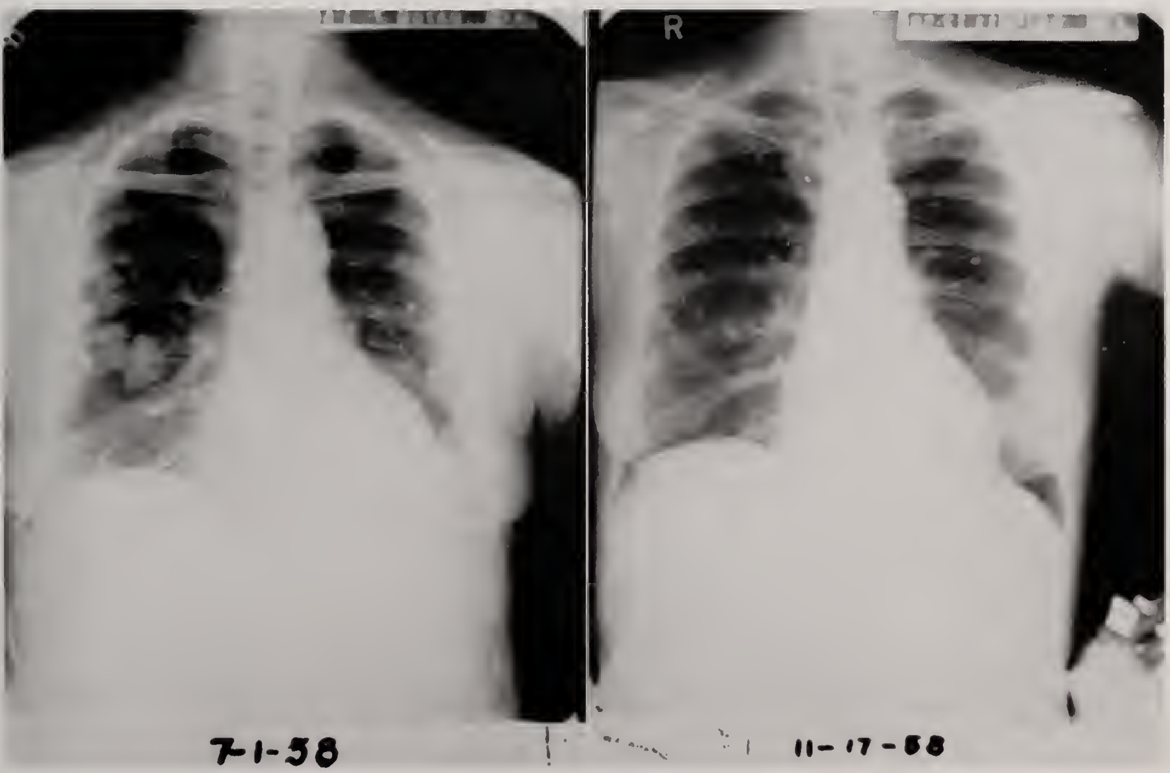


FIG. 5. Regression of pulmonary metastases in a patient receiving o,p′ DDD.

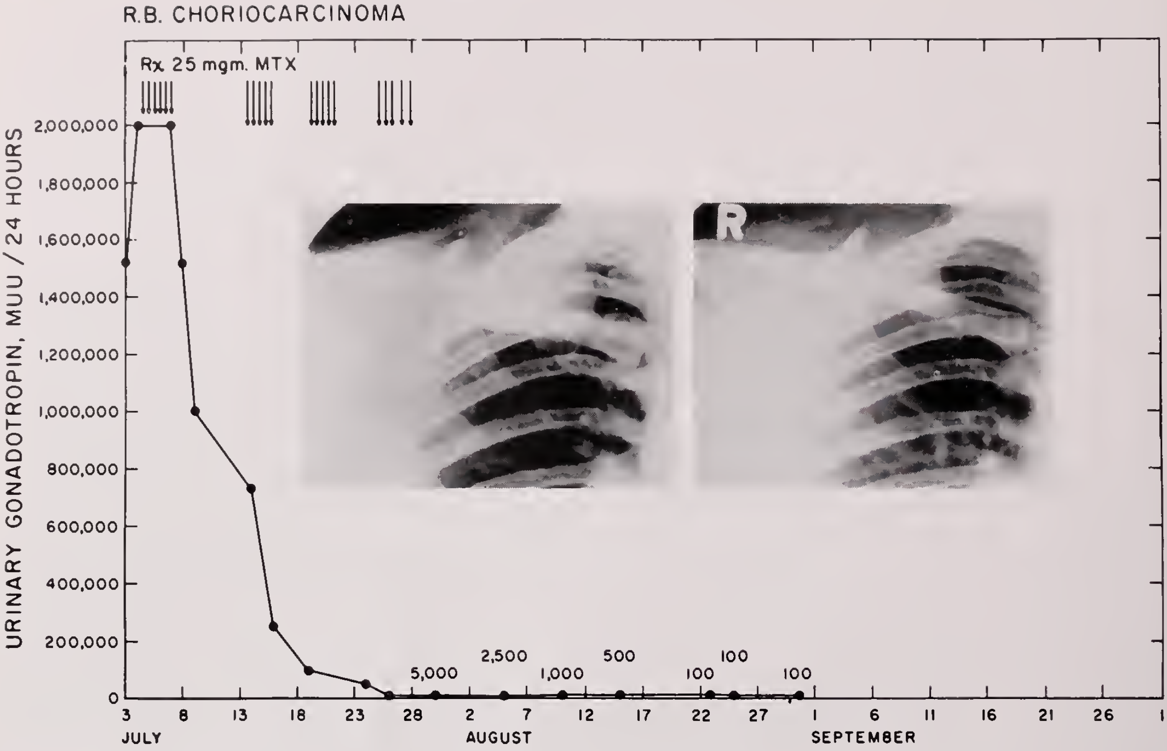


FIG. 6. Effect of o,p′ DDD on pulmonary choriocarcinoma metastases and urinary gonadotropin.

Table 3 summarizes our total results to date in relation to the histology of the lesion in the patients whom we have treated. Of 44 patients with unequivocal metastatic choriocarcinoma, all of whom had metastatic disease at the time of the onset of therapy, we have a complete remission rate of 48 per cent. We would ordinarily not expect even two or perhaps three of these patients to show a benign clinical course.

TABLE 3

Histologic Diagnosis on Admission in 63 Women with Metastatic Trophoblastic Disease

Choriocarcinoma	44
Chorioadenoma destruens	10
Hydatid mole	5
Trophoblastic tissue with decidua	1
Decidual reaction	2
Hydatid villi	1
	63

Patients with a less malignant variety of tumor have the same incidence of total remission, but because of the vagaries of a spontaneous clinical course of this type of disease, even when it is metastatic, the degree of therapeutic accomplishment cannot be stated in quite as explicit terms except to say that all have advanced cases and are seen quite late in the course of their disease.

In closing I should like to indicate that these studies have revealed the specific therapeutic value of the agents discussed and to emphasize that the hormone-producing tumor provides a quantitative index for the evaluation of chemotherapeutic response to a degree which is unique in the field of cancer chemotherapy.

II. MALIGNANT LYMPHOMA AND CHRONIC LEUKEMIA

PAUL P. CARBONE, M.D.

THE CHEMOTHERAPY of patients with malignant lymphoma and chronic leukemia has been evaluated extensively in well-controlled studies. These studies have suggested several categories of chemotherapeutic agents which are capable of causing tumor regression and relief of symptoms. This report will attempt to summarize briefly the use of these agents and their reported effectiveness. Tumor regression constitutes a 25 per cent reduction in tumor or organ size and/or return of the peripheral blood abnormalities to essentially normal for at least a two-week period.

Of the available drugs today, the alkylating agent, nitrogen mustard, was the first to be used in patients with Hodgkin's disease.[1] The alkylating agents cause tumor regressions in patients with other malignant lymphomas[2] and chronic leukemias.[3, 4] In previously untreated Hodgkin's disease tumor regression rates have been reported as high as 100 per cent, ranging down to 20 per cent in patients with other malignant lymphomas.[5] In comparative studies the response rate of nitrogen mustard is approached by cyclophosphamide[2] and thioTEPA®[6] but not by other alkylating agents.[2,5]

The use of the oral alkylating agents, busulfan and chlorambucil, in patients with chronic leukemia was suggested by Elson,[7] who noted that the former agent had a greater depressing effect on the bone marrow of rats while chlorambucil affected the lymphocytic elements. Clinical studies by Rundles et al[8] confirmed the beneficial effects of busulfan in chronic myelogenous leukemia and the better therapeutic index of chlorambucil in chronic lymphocytic leukemia. The response rates were 85 to 100 per cent with chronic myelogenous leukemia and 66 per cent in chronic lymphocytic leukemia. With successive courses of alkylating agents refractiveness developed and other agents must be considered.

Another group of agents which have proven effective in the treatment of patients with lymphomas are the alkaloids of the plant, *Vinca rosea* Linn.[9] In 1960 Johnson et al[10] reported that a crystalline extract of *Vinca rosea* Linn had antitumor activity against several rodent tumors. Vinblastine (VLB) was tested clinically and found to be active in 16 of 20 patients with Hodgkin's disease. The activity of VLB in patients with lymphosarcoma and reticulum-cell sarcoma has not been as impressive.[11] The major side-effect with VLB has been severe leukopenia without thrombocytopenia.[12, 13] Recently a new derivative, vincristine,[14] has been tested in our clinics and has produced remissions in 10 of 10 patients with Hodgkin's disease and 4 of 7 patients with lymphosarcoma without seriously affecting the peripheral white blood cell or platelet counts. Several of these patients have had alkylating agents and folic acid antagonists without response or relapse on maintenance therapy. The major kinds of toxicity with vincristine have been peripheral neuritis, obstipation, alopecia, and unexplained abdominal and bone pain.

A third group of agents to be considered are the metabolic antagonists of purines, folic acid and pyrimidines. Six-mercaptopurine, a purine antagonist, has caused objective improvement in 82 per cent of the patients with chronic myelogenous leukemia.[15] A folic acid antagonist, Methotrexate®, has some activity in the malignant lymphomas but appears to be associated with appreciable amounts of toxicity.[16] The pyrimidine antagonist of experimental interest is azauridine, which inhibits the normal conversion of orotidylic to uridylic acid. In chronic myelogenous leukemia patients white blood cell counts, spleen size, and blast count improvement occur acutely in less than two weeks and are associated with little host toxicity.[17] The use of

Methotrexate and azauridine is at present only of experimental interest in these diseases.

A fourth category of effective agents is the corticosteroids which beneficially affect the hemolytic anemia, thrombocytopenia, and leukopenia of malignant lymphoma and chronic lymphocytic leukemia patients.[18, 19] Adrenal steroids exert a lympholytic effect with a decrease in lymph node and spleen size.[19] The response of anemia and thrombocytopenia in chronic lymphocytic leukemia and malignant lymphoma patients may be delayed and require two to three months of therapy.[20] Control of fever, tumor size and anemia in Hodgkin's disease has been reported.[21]

The colchicine derivatives have been used effectively in chronic myelogenous leukemia patients.[22] Strict attention to titration of a proper dose appears to be necessary, but satisfactory control of the disease can be achieved in patients refractory to other chemotherapeutic agents.

Another of the experimental agents, methyl-glyoxal-bis-guanylhydrazone, or methyl-GAG,[23] has produced tumor regressions in Hodgkin's disease and reticulum-cell sarcoma resistant to other forms of therapy. With a high degree of activity in acute myelogenous leukemia patients it would be logical to expect activity in the blast crisis of chronic myelogenous leukemia or chronic myelogenous leukemia itself. In four patients, two with blast crisis and two without, no significant antitumor effect has been noted at the tolerated dosage.[24]

REFERENCES

1. Craver, L. F.: Radiology, 1948, **50**, 486.
2. Gold, G. L., Salvin, L. G., and Shnider, B. I.: Cancer Chemother. Rep., 1962, **16**, 417.
3. Haut, A., Abbott, W. S., Wintrobe, M. M., and Cartwright, G. E.: Blood, 1961, **17**, 1.
4. Huguley, C. M.: Cancer Chemother. Rep., 1962, **16**, 241.
5. Zubrod, C. G.: AMA Arch. Intern. Med., 1960, **5**, 663.
6. Zubrod, C. G., and others: J. Chron. Dis., 1960, **11**, 7.
7. Elson, L. A.: Ann. N.Y. Acad. Sci., 1958, **68**, 826.
8. Rundles, R. W., and others: Amer. J. Med., 1959, **27**, 424.
9. Noble, R. W., Beer, C. T., and Cutts, J. H.: Ann. N. Y. Acad. Sci., 1958, **76**, 882.
10. Johnson, I. S., Wright, H. F., Svoboda, G. H., and Vlantis, J.: Cancer Res., 1960, **20**, 1016.
11. Brindley, C. O., Eastern Solid Tumor Coöperative Chemotherapy Group: Personal communication.
12. Frei, E., III, and others: Cancer Chemother. Rep., 1961, **12**, 125.
13. Armstrong, J. G., Dyke, R. W., Founts, P. J., and Gahumen, J. E.: Ibid., 1962, **18**, 49.
14. Carbone, P. P., Bono, V., Frei, E., III, and Brindley, C. O.: Clinical studies with vincristine, in press.
15. Ellison, R. R., and Burchenal, J. H.: Clin. Pharmacol. Ther., 1960, **1**, 631.
16. Frei, E., III: Personal communication.
17. Fallon, H., and Frei, E., III: Proc. Amer. Ass. Cancer Res., 1961, **3**, 224.
18. Kofman, S., and others: Cancer, 1962, **15**, 338.
19. Shaw, R. K., Boggs, D. R., Silberman, H. L., and Frei, E., III: Blood, 1961, **17**, 182.
20. Freyman, J. G., Vander, J. B., Marler, E. A., and Meyer, D. G.: Brit. J. Haemat., 1960, **6**, 303.
21. Straus, B., and others: Amer. J. Med., 1952, **12**, 170.
22. Leonard, B. J., and Wilkinson, J. F.: Brit. Med. J., 1955, **1**, 874.
23. Friedlander, B. L., and French, F. A.: Cancer Res., 1958, **18**, 360.
24. Carbone, P. P., and others: Effectiveness of methyl-glyoxal-bis-guanylhydrazone (CH_3-G) in human malignant disease. Proc. VIII International Cancer Congress. Moscow: Medgiz Publ. House, 1962, p. 339.

III. SOLID TUMORS

EMIL FREI III, M.D.

UNFORTUNATELY, progress in the chemotherapy of solid tumors has lagged far behind that of the acute leukemias, lymphomas, and choriocarcinomas. Moreover, the problem of studying and of evaluating the effects of chemotherapeutic agents in patients with solid tumors presents major difficulties.

This problem is well illustrated by recent experience with the antitumor agent, fluorouracil. This pyrimidine antimetabolite has been used extensively in the clinic during the past several years. In figure 1 each dot represents a reported clinical study of the effects of fluorouracil in patients with responsive solid tumors, that is, patients with carcinoma of the large bowel, breast, ovary, and liver. The ordinate represents the per cent of patients showing tumor regression and the abscissa the time of the report. It is apparent that responsiveness to fluorouracil varies considerably among investigators to the extent where

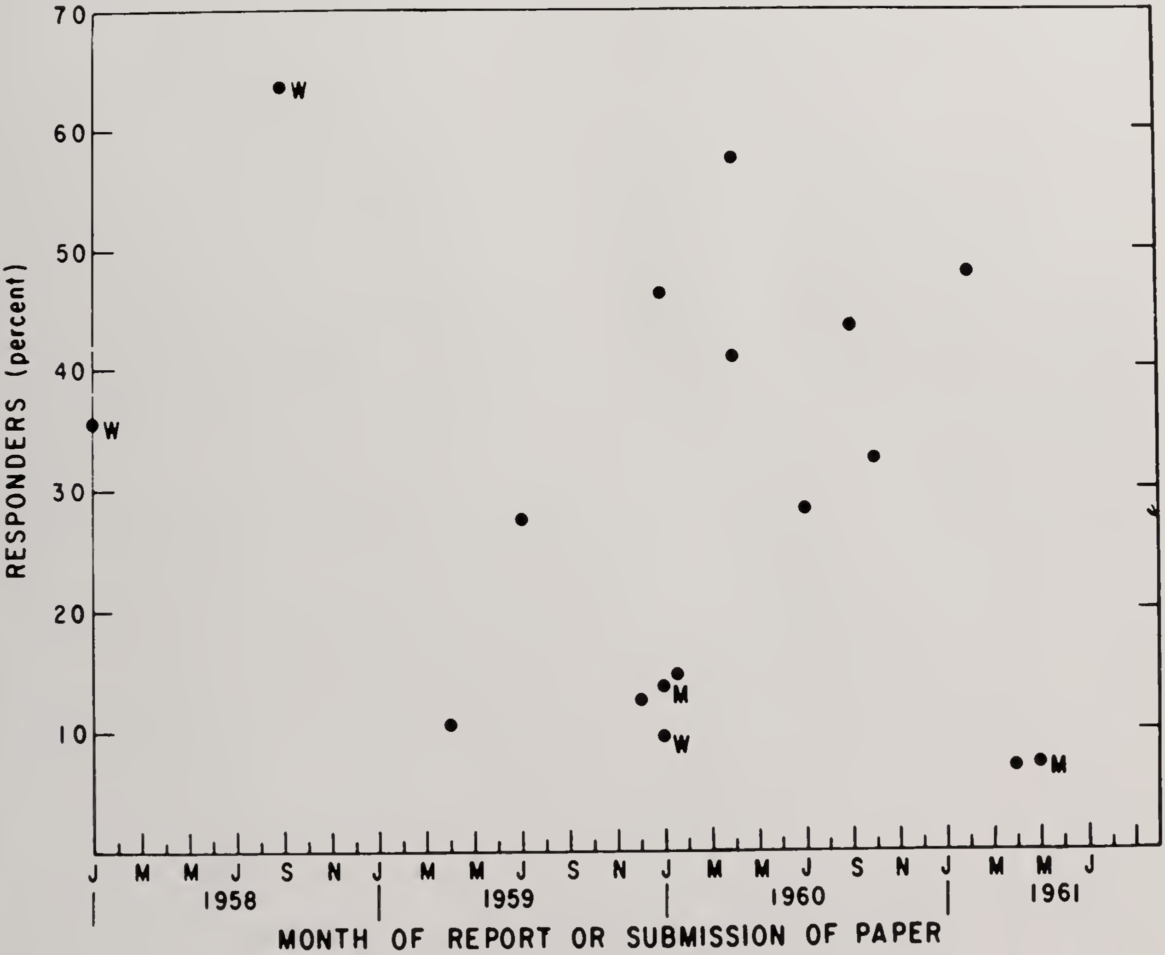


FIG. 1. 5-Fluorouracil: response in "responsive" sites.

in many instances even the 95 per cent confidence limits do not overlap.

What are the reasons for these differences? Although the patient composition differs somewhat in these various reports, the variation is not nearly great enough to explain the difference in responsiveness. Moreover, with few exceptions there were no major differences in drug dosage, schedule of drug administration, or the amount of toxicity produced. In fact, a detailed analysis of these data failed to disclose the reason for these widely varying responses observed with the same agent, used essentially the same way, in comparable samples of patients with solid tumors.

In all probability the difficulty here and the difficulty generally in evaluating chemotherapeutic agents in patients with solid tumors resides in the following areas. Some solid tumors such as those of the gastrointestinal tract are difficult to measure and, as a result, response is difficult to evaluate. In addition, criteria for response in patients with solid tumors have not been standardized. Finally, our knowledge concerning the natural history of many metastatic solid tumors is inadequate.

I present this as background because throughout my presentation it is important to remember that we have these major difficulties in studying and interpreting the effects of agents used. As a result it is often difficult to draw firm conclusions, and some of what I have to say is necessarily controversial.

I would like now to turn to the various classes of chemotherapeutic agents and to consider their effects on patients with solid tumors. The antimetabolites will be considered first. The effects of the fluoropyrimidines, fluorouracil (FU), and fluorodeoxyuridine (FUDR) on patients with carcinoma of the breast, large bowel, ovary and liver are presented in table 1. The fractions represent the number of patients showing tumor regression over the total number of patients reported, and this is expressed as a decimal. Between 20 and 30 per cent of patients in all of these categories showed evidence of tumor regression. There is no advantage of FUDR over FU. It must be emphasized that the regression was partial, that complete regressions rarely occur, and that regressions tended to be brief, usually lasting for only one to two months. The fact that these regressions were achieved only at some cost in patient toxicity reduces the usefulness of these agents. This toxicity related primarily to the bone marrow and to the gastrointestinal tract. In summary, though the fluoropyrimidines constitute a major research lead in cancer chemotherapy, their practical clinical value is limited.

TABLE 1

Pyrimidine Analogs in Solid Tumor Patients

Drug	Site							
	Breast		Colon and Rectum		Ovary		Liver	
5 FU	43/149*	.29	69/331	.21	12/42	.29	6/25	.24
5 FUDR	11/33	.33	11/50	.22	1/4	.25	1/3	.20

* Response/total patients.

Other pyrimidine analogs studied clinically include:
Iododeoxyuridine
Azauridine.

The other antimetabolites, for example, the folic acid antagonists and 6-mercaptopurine, which are highly effective in the leukemias and in choriocarcinomas, have not proven particularly effective or useful in the treatment of patients with solid tumors.

The next class of antitumor agents I should like to consider are the alkylating agents. In table 2 are listed the solid tumors which respond to alkylating agents in descending order of responsiveness. Across the top are listed the various alkylating agents: nitrogen mustard, the prototype for this class of compounds; thioTEPA®; CB 1348, otherwise known as chlorambucil or Leukeran®; and triethylenemelamine. The decimal number refers to the proportion of patients showing tumor regression and the figure in parentheses the median duration in months of such tumor regression. These values represent either the result of one large study or the combined results of several studies.

One-third to one-half of patients with carcinoma of the ovary will have measurable tumor regression when treated with certain alkylating agents. This is accompanied by considerable and often complete disappearance of symptoms and return to full activity. The median duration of response is of the order of several months.

Neuroblastoma, a childhood tumor with a highly variable natural history, responds frequently to alkylating agents. These tumor regressions are usually only partial and transient, the median duration being only one to two months. While symptomatic improvement occurs, return to the asymptomatic and full activity state is rare.

Alkylating agents have been extensively used clinically in patients with carcinoma of the breast and lung. In a small proportion of the patients tumor regression occurs. As with neuroblastoma, however, regressions are incomplete and transient. Certain types of carcinomas of the lung, particularly oat-cell carcinoma, are more likely to respond to alkylating agents than are the more common varieties.

TABLE 2

Alkylating Agents for Solid Tumor Patients

	HN_2	TSPA	CB	TEM
Ovary	0	.50 (6+)*	.47 (?)	.3 (2)
Neuroblastoma	.4 (2)	.4 (1)	0	—
Breast	.24 (1.5)	.10 (1)	+	+
Lung	.10 (1)	.12 (1)	+	.21 (1+)

*$x(y)$ x = proportion of patients with tumor regression
y = median duration in months

Other diseases reported to respond to alkylating agents:
Seminoma—Sarcolysin
Hepatoma—Sarcolysin
Melanoma—TSPA.

Other diseases which reportedly respond to alkylating agents are seminomas and hepatomas, which have been reported to respond to sarcolysin (phenylalanine mustard), and melanomas, which have been reported to respond to thioTEPA. The evidence for this requires extension and confirmation.

Which alkylating agent should one select for treatment of a given disease? There are only two diseases for which there is conclusive evidence concerning the superiority of one alkylating agent over another, and these are Myleran® for chronic myelogenous leukemia and chlorambucil for chronic lymphocytic leukemia. For most diseases there tends to be relatively little difference in the comparative responsiveness to alkylating agents, but quantitative comparative studies are few and conclusions cannot be drawn.

In this regard, intensive research of the past several years has been directed toward the development of different and more effective alkylating agents. One product of this research has been the alkylating agent, cyclophosphamide (Cytoxan®). There is biochemical evidence that Cytoxan should selectively damage cancer cells, and indeed Cytoxan is much more effective against animal tumors generally than are the other alkylating agents. However, with the probable exception of acute leukemia, clinical studies have not revealed Cytoxan to be superior to the other alkylating agents in the treatment of neoplastic diseases.

The next class of antitumor agents to be considered are the antibiotics. The most important of these is actinomycin D. Wilms's tumor, neuroblastoma, and embryonal rhabdomyosarcoma respond to actinomycin D (table 3). It is of interest that these are all childhood tumors. With the possible exception of Hodgkin's disease and the definite exception of choriocarcinoma, actinomycin D has been inactive in adults with solid tumors. In contrast to the alkylating agents, which rarely produce complete tumor regression of solid tumors, actinomycin D produces complete tumor regression in 20 per cent of patients with Wilms's tumor and in 10 per cent of patients with embryonal rhabdomyosarcoma. The major limitation, however, of actinomycin D is the short duration of these remissions, the median being of the order of one to two months. Repeated courses of treatment, even in patients who have complete regressions with the first course of treatment, are usually ineffective.

TABLE 3

Antibiotics: Actinomycin D

	Remissions			
	Total Per cent	Complete Per cent	Partial Per cent	Median Duration (Mo.)
Wilms's tumor	40	20	20	2
Neuroblastoma	40	0	40	1
Embryonal rhabdomyosarcoma	30	10	20	1

Actinomycin also active in Hodgkin's disease.

Other antibiotics studied clinically:

- Glutamine analogs: asaserine and norleucine—inactive in solid tumors.
- Mitamycin C: Evidence for activity against osteogenic sarcoma.

A number of other antibiotics have been studied clinically. The glutamine analogs, although highly effective in a number of rodent tumors, have been inactive in man. Recent preliminary evidence suggests that mitamycin C, an antibiotic discovered and developed in Japan, is effective in patients with osteogenic sarcoma.

An additional class of agents which have been recently introduced are the periwinkle plant alkyloids, vinblastine (Velban®), and vincristine. Dr. Carbone has emphasized that these agents have a high order of activity in Hodgkin's disease and perhaps lymphosarcoma, and Dr. Hertz has indicated that vinblastine has some activity in patients with choriocarcinoma. Vincristine induces complete remission in more than 50 per cent of patients with acute lymphocytic leukemia. There is evidence for activity of vinblastine and vincristine in patients with carcinoma of the breast and perhaps with certain other solid tumors. These compounds are relatively new, and their ultimate place in the management of patients with solid tumors remains to be defined.

Two areas of solid tumor chemotherapy which are developing rapidly are regional perfusion of drugs and the use of drugs as adjuvants to primary cancer surgery. The administration of drugs by regional perfusion, although still in the experimental stage, has shown considerable promise. A number of well-controlled studies involving drug administration at the time of primary cancer surgery have been performed. There is evidence that thioTEPA administered at the time of primary operation for carcinoma of the breast will decrease the frequency and delay the development of recurrences.

In conclusion, what has been accomplished in the drug treatment of solid tumors? With the exception of patients with choriocarcinoma, carcinoma of the ovary and neuroblastoma, it is doubtful that we have prolonged survival by drug treatment. The majority of the solid tumors will not respond to any of the chemotherapeutic agents, and responses which do occur in the remaining patients tend to be incomplete and transient. Nevertheless, some degree of responsiveness has been demonstrated, and perhaps this fact above all else augurs well for the future.

The brief duration of response in patients with solid tumors to chemotherapeutic agents deserves comment. Good tumor regressions may be achieved, but these rarely last for more than one to two months, at which time continued or repeated treatment with the same agent is ineffective; that is, the tumor has become resistant. Clearly, the present and particularly the future of cancer chemotherapy, as has proven true in the field of chemotherapy of infectious diseases, will be beset by the problems of drug resistance.

IV. ACUTE LEUKEMIA

EMIL J. FREIREICH, M.D.

ACUTE LEUKEMIA was essentially an untreatable disease prior to 1948.[1] The introduction of the antifolic acid compounds[2] not only introduced the antimetabolite as chemotherapeutic agents but also initiated the era of chemotherapy for human acute leukemia.

At the present time there are three classes of agents that have proven activity against human acute leukemia; these are the folic acid antagonists of which Methotrexate[*] is a prototype, the purine antagonists of which 6-MP (6-mercaptopurine) is a prototype, and the adrenocorticosteroid hormones.[3] These compounds are all primarily active against acute lymphocytic leukemia in childhood.[4]

The frequency of response to chemotherapy for 115 patients with acute lymphocytic leukemia is shown in figure 1. The patients are grouped by age, and the height of the bars indicates the frequency of hematologic response to therapy. The different degrees of shading within the bar indicate the completeness of response to chemotherapy. The best response any patient has during his entire course was used for this analysis. Over 85 per cent of the patients under the age of 20 have at least one response to therapy, whereas only 41 per cent of patients over 20, that is, the adult group, show any improvement. Moreover, response is more complete in children, particularly those under ten. This is indicated

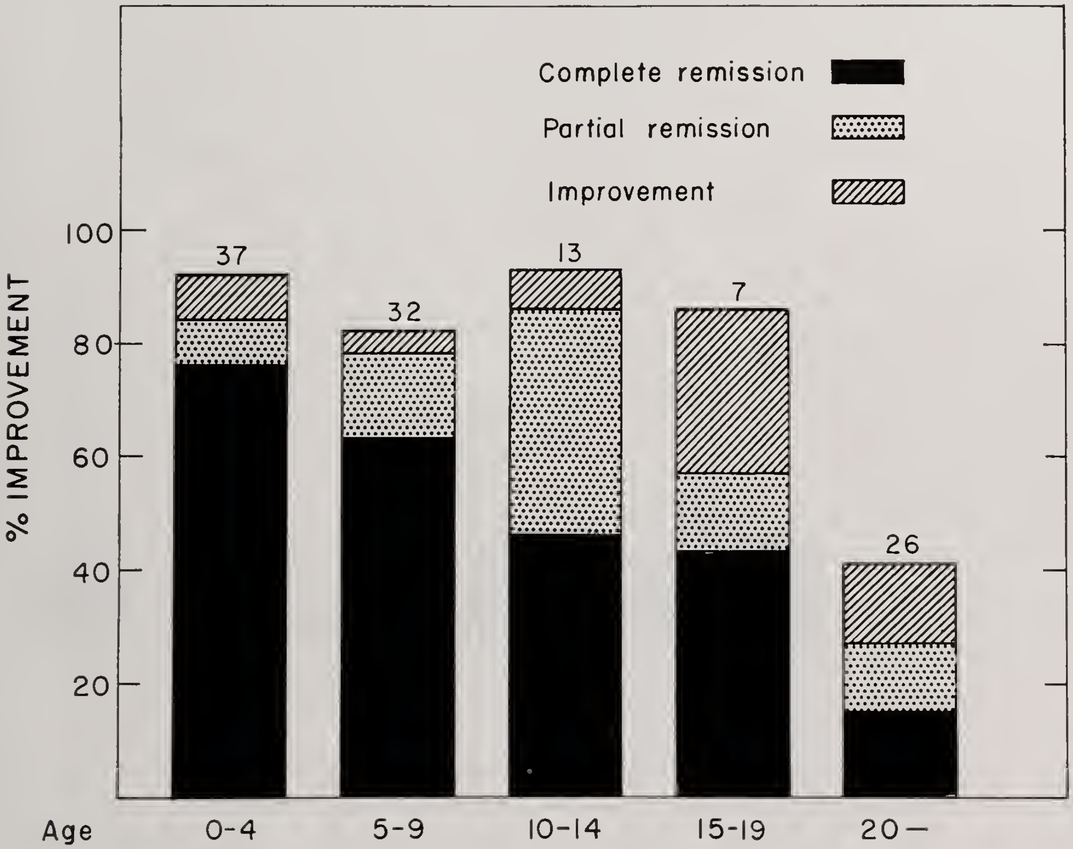


FIG. 1. Frequency of hematological improvement in 115 patients with acute lymphocytic leukemia.

by the solid bar, and it becomes progressively less frequent with increasing age. This is important because complete remissions last longer, being a median of five months, than partial remissions which last a median of three months, and hematologic improvements which are only two months in duration.

These findings contrast with those for patients with acute myelocytic leukemia (figure 2). For the entire group of 63 patients 74 per cent failed to show any objective response. Thus, only 26 per cent showed any response at all to chemotherapy, and only half of these, or 13 per cent, had complete remissions. In this group the patient's age has no major effect on response, but the majority of these patients are adults.

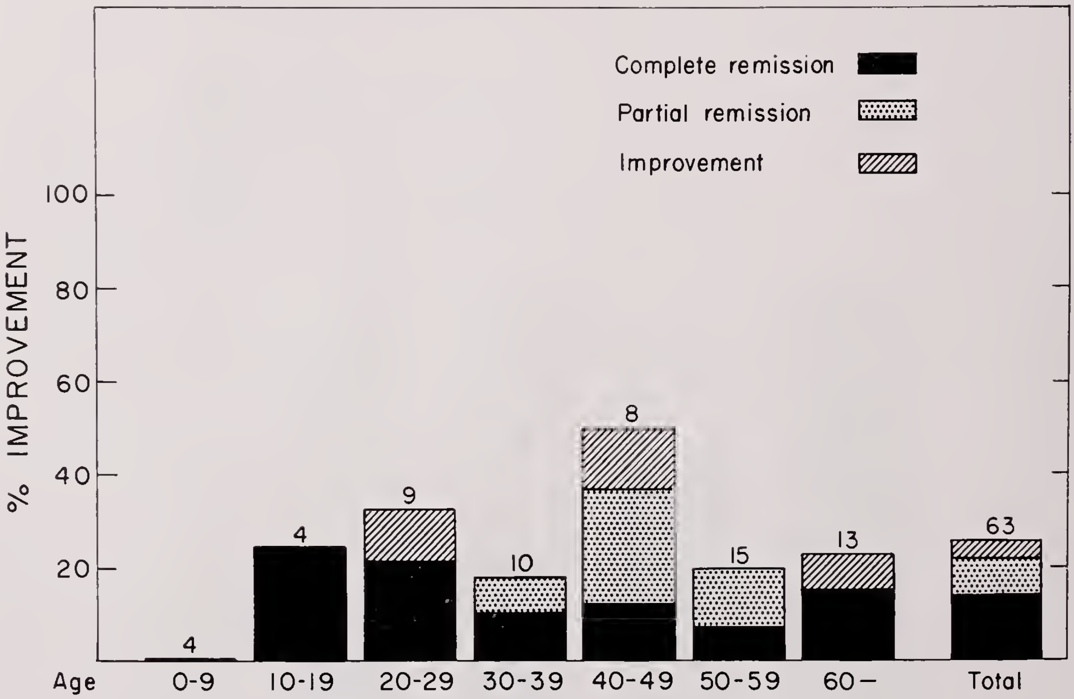


FIG. 2. Frequency of hematological improvement in 63 patients with acute myelocytic leukemia.

The preceding data pertaining to the frequency of occurrence of remissions in the disease correlate with data on survival (figure 3). For the survival data the 178 patients were divided into three groups. Group 1 is acute lymphocytic leukemia under the age of 20, the group with the high frequency of response, 87 per cent showing some response. The other groups were acute lymphocytic leukemia over 20, and acute myelocytic leukemia. These two groups have low frequencies of response, 40 and 26 per cent respectively. The three graphs show the survival dated from the onset of symptoms, date of diagnosis, and from admission. All three graphs illustrate that the group of patients having the highest frequency of response, patients with lymphocytic leukemia under age 20, have the best survival. This is most clear in the lower two graphs dated from the more precise times, diagnosis or admission. However, this is only indirect evidence that remission correlates with survival. A more direct analysis of the effect of remission is possible by examining the survival of those who respond to therapy separately from those who fail to respond (figure 4).

These three separate graphs indicate the three groups of patients previously defined. The patients showing response to therapy are shown in the solid circles, and in each class of disease these patients have a much better survival than

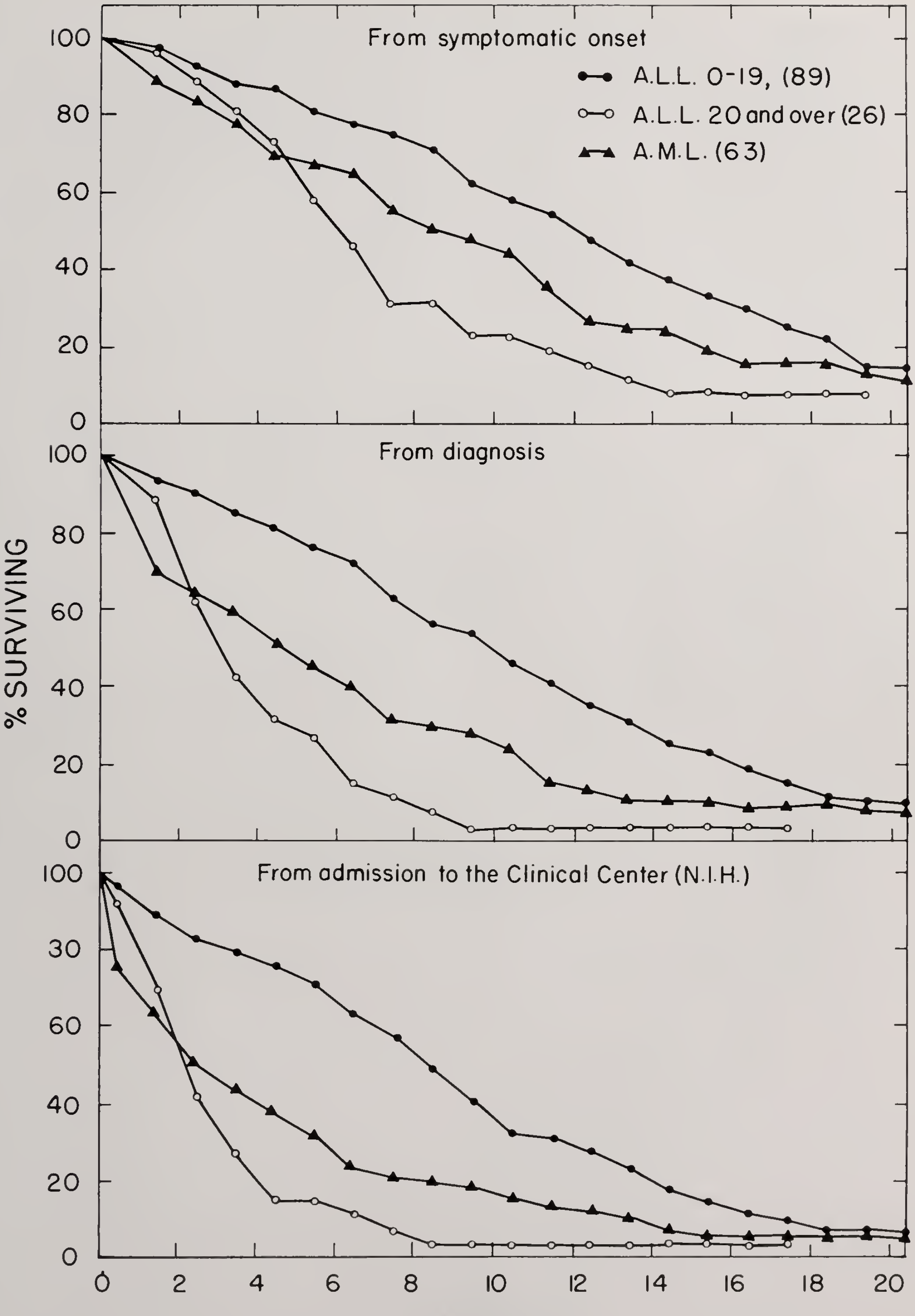


FIG. 3. Survival of 178 patients with acute leukemia.

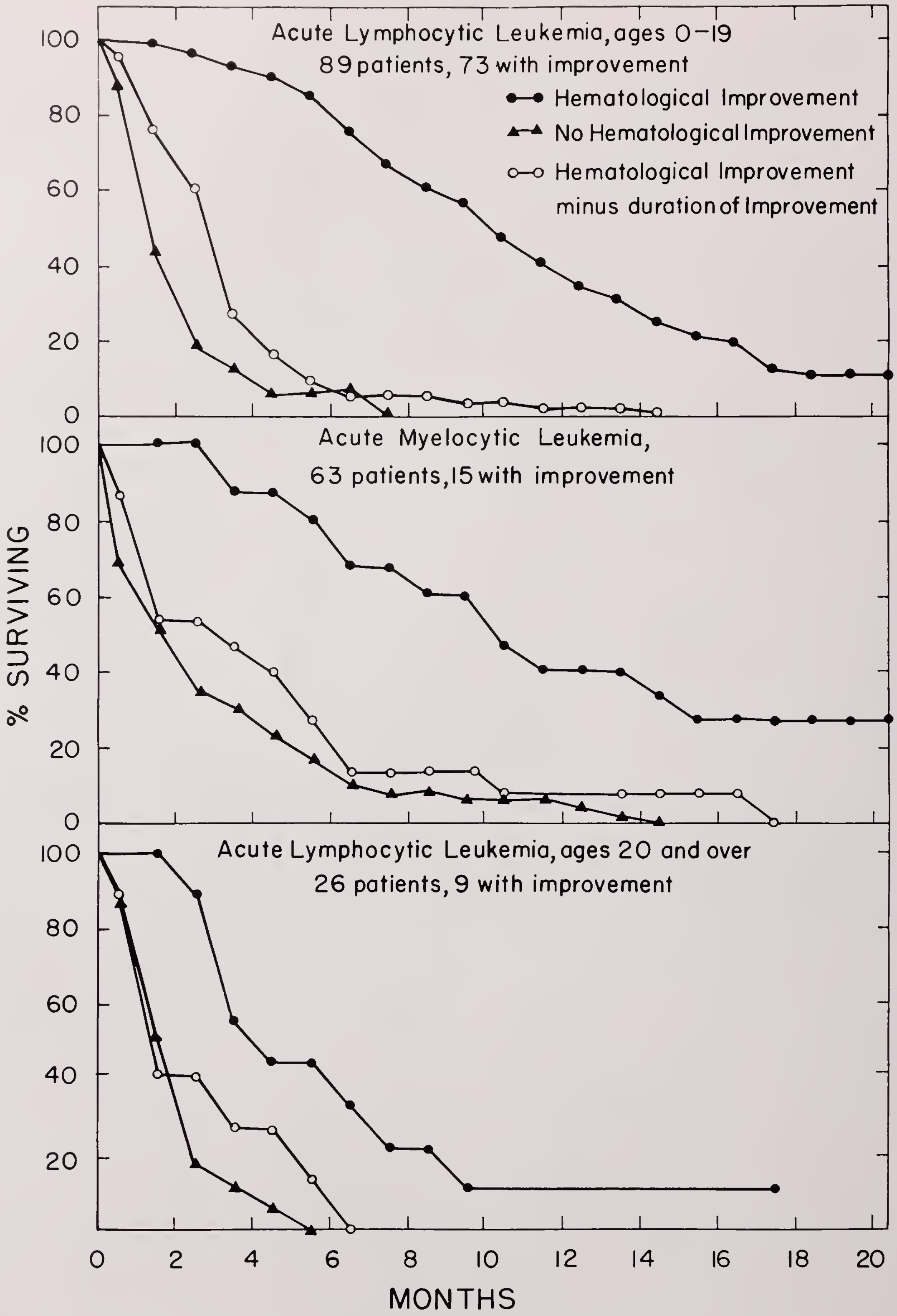


Fig. 4. Effect of hematological improvement on survival—from admission to the Clinical Center (NIH).

the patients who do not respond to therapy, shown by the solid triangles. If the time that each patient is receiving therapy which produced a response, that is, the period of time that a patient is getting effective therapy, is subtracted from his survival, the resulting figure will represent the time that the patient spends with active disease receiving ineffective therapy. The resultant data are plotted on the graphs in open circles, and these curves are quite similar to those for patients who failed to respond to therapy (solid triangles). Thus, the difference in survival between patients who fail to respond and those who do is accounted for by the time that a patient is receiving effective therapy which produces objective hematologic improvement. Moreover, the data for patients who fail to respond to therapy agree very well with published data on survival of patients prior to 1948, that is, prior to effective chemotherapy. Thus, these data indicate that the occurrence of improvement is reflected in improved survival free of disease symptoms.[4]

The individual drugs which are useful for acute leukemia have different uses. The adrenocorticosteroids are effective in inducing a very high percentage of objective improvements, 60 to 80 per cent in children with lymphocytic leukemia. In patients with myelocytic leukemia the steroid hormones are virtually completely inactive. However, the remissions last for only a short period of time. Figure 5 illustrates data from a study in which children with acute lymphocytic leukemia were given adrenal steroid hormones as initial therapy.[5] When they entered remission they were randomly assigned to two treatment groups. One-half of them received no maintenance therapy (placebo) indicated by the

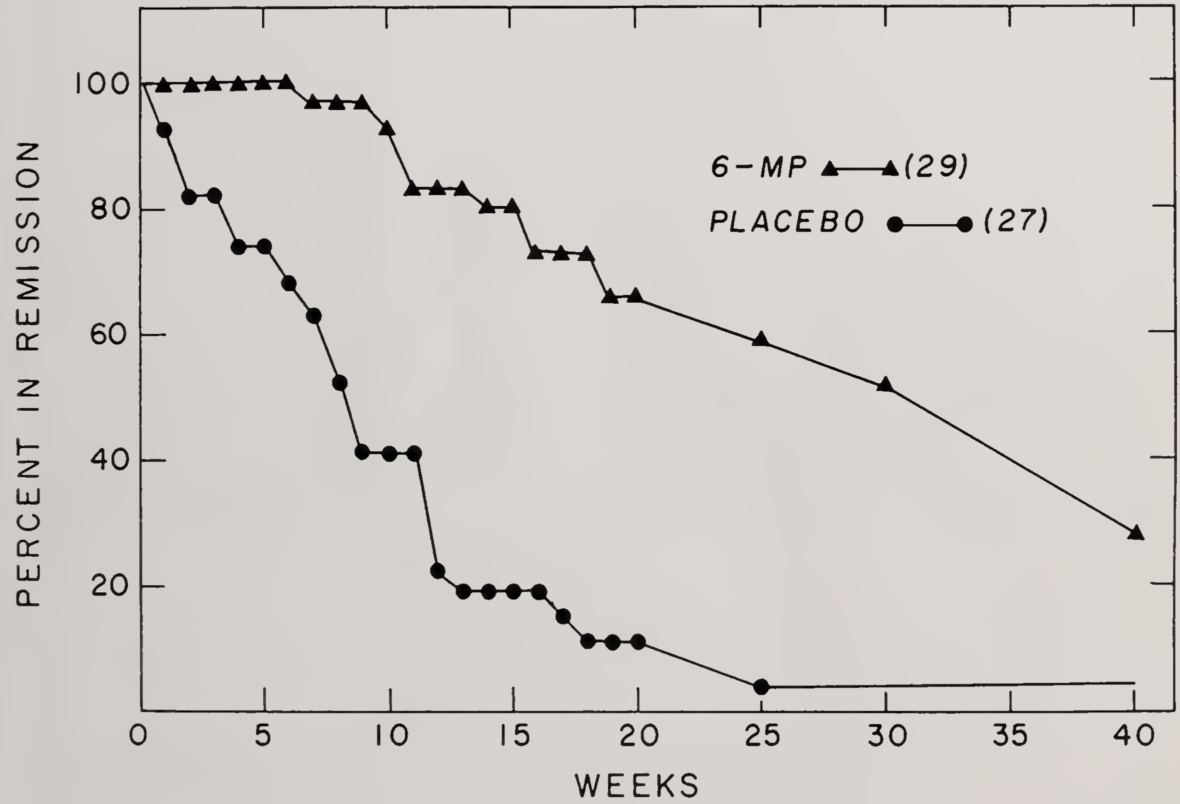


Fig. 5. Duration of complete remissions induced by adrenocortical steroids.

solid circles. The median duration of these remissions was only eight weeks. Thus, the disease returned rapidly. The other group received 6-mercaptopurine (6-MP) maintenance therapy after remission was induced by steroid hormones. In this group the remissions were much longer, the median being over 30 weeks. This indicates that the adrenal steroid hormones are primarily useful for inducing remissions, while antimetabolites like 6-MP are useful for maintaining remissions. The adrenal steroids have also found great usefulness in supportive therapy for tiding patients over a critical episode of septicemia, infection, or hemorrhage.

The optimal use of the antimetabolites is illustrated by a recent study performed by the Acute Leukemia Group B.[6] The design of this study is shown in figure 6. All patients referred to the coöperating Centers who had not received any previous chemotherapy were randomly assigned to three treatment programs. In the first program the patient received initial therapy with Methotrexate, an antifolic compound. In the second group initial therapy was with 6-mercaptopurine, and in the third group initial therapy was with a combination of 6-mercaptopurine and Methotrexate. The patients were treated for a minimum of six weeks. If they went into remission the same drug was continued as maintenance therapy until relapse occurred. At the time that the patient either failed to respond or relapsed he would then enter a second phase of the study in the first two groups. The patients who got Methotrexate initially then received 6-MP as their second course of therapy, and those who received 6-MP initially received Methotrexate as their second course of therapy. This design would determine the best way to use these anti-

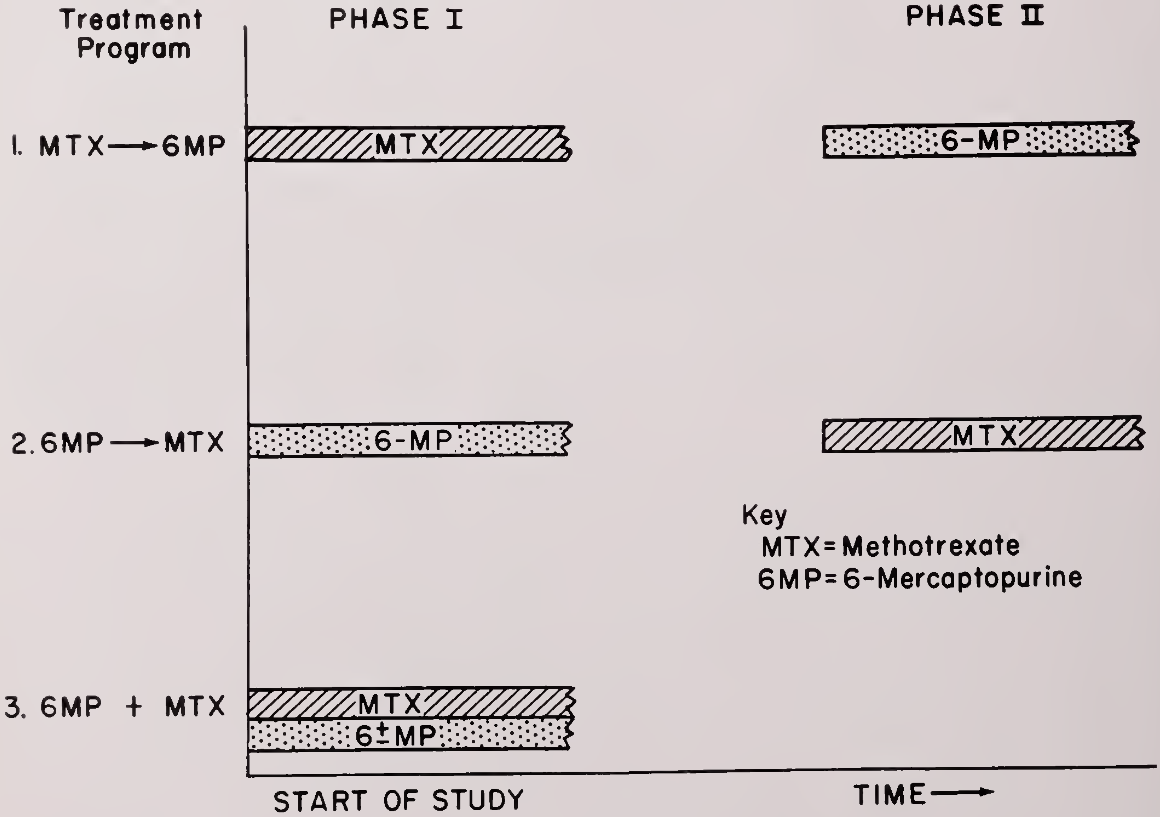


Fig. 6. Treatment programs.

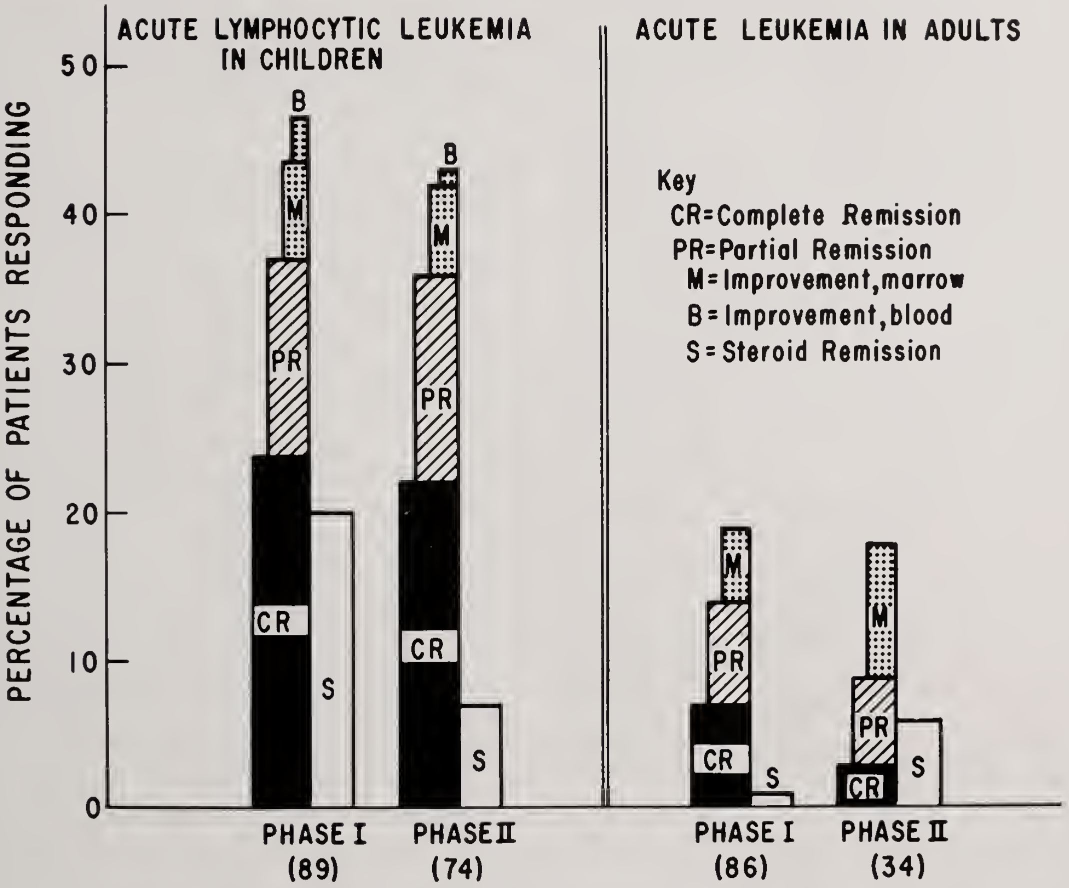


Fig. 7. Comparison of response rates in phases I and II.

metabolites, either in sequence or in combination, and which sequence would give the best results.

The response rate was higher for the combination of both drugs, but the frequency of response was no higher than would have been predicted from the frequency of response of either drug given independently. The frequency of response in phase I, the initial treatment, was compared with the response in phase II for both drugs. No significant difference was found between 6-mercaptopurine being given as initial treatment or being given as treatment following antifolics, and likewise for the antifolics no significant difference between being given as initial treatment or following treatment with 6-mercaptopurine. Combining the data for both 6-MP and Methotrexate for both phases (figure 7) showed that the response rate was the same in phase I and in phase II for both children and adults. Thus remissions could be induced as frequently regardless of which drug was used initially or whether given together.

This was confirmed by data on survival (figure 8), which indicated that the three treatment programs gave generally similar survival patterns; no significant differences were found between the use of the three treatment programs used in this study. For these two agents, the antifolics and the antipurines, it does not seem to make any significant difference whether they are given in combination as initial treatment or given sequentially, or whether one is used before the other, except for the fact that the antifolics are largely inactive in adult leukemia.

There are several promising newer agents that are being studied at present. Cyclophosphamide, or Cytoxan®, is an alkylating agent which has definite activity against acute lymphocytic leukemia. Vinblastine, an alkaloid from the periwinkle, has induced remissions infrequently in children with acute lymphocytic leukemia. The compound is highly toxic and will probably not be useful in acute leukemia. However, a more recently developed alkaloid, vincristine,[7] extracted from this same plant, has shown substantial activity in acute lymphocytic leukemia. A compound called methyl gloxal bis-guanylhydrazone[8] has been shown to have remission-inducing effectiveness against acute myelocytic leukemia in adults, a disease which has been essentially untreatable.

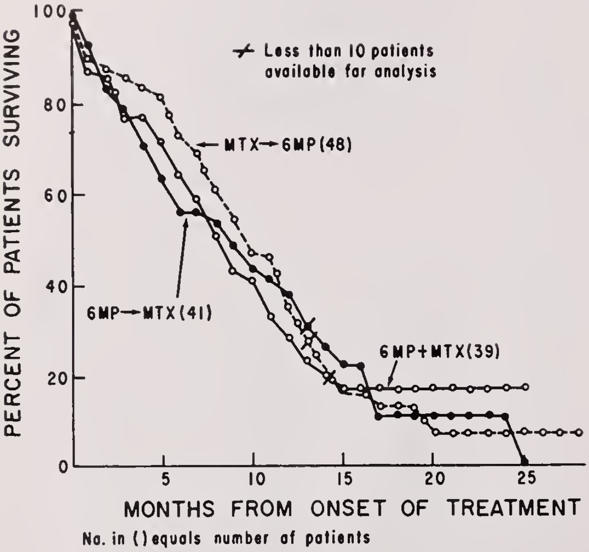


FIG. 8. Survival of children with acute lymphocytic leukemia from treatment to death.

In addition to finding new compounds, better ways to use the compounds we now have are actively under investigation. Different dosage schedules and different routes of administration are currently under investigation. Finally, studies directed toward improving the therapy of the major complications of leukemia, hemorrhage, and infection are being pursued. Replacement transfusion of platelets and granulocytes has great potential usefulness.

In summary, acute leukemia is a form of malignant disease which has been significantly affected by chemotherapy. The fact that therapy has improved consistently over the short period of 13 years leads to the promise of even greater benefit to the patient in the next decade.

REFERENCES

1. Tivey, H.: Natural history of untreated acute leukemia. Ann. N. Y. Acad. Sci., 1954, **60**, 322.
2. Farber, S.: Some observations on effect of folic acid antagonists on acute leukemia and other forms of cancer. Blood, 1949, **4**, 160.
3. Haut, A., Wintrobe, M. M., and Cartwright, G. E.: Clinical management of leukemia. Amer. J. Med., 1960, **28**, 777.
4. Freireich, E. J., and others: Effect of chemotherapy on acute leukemia in the human. J. Chron. Dis., 1961, **14**, 593.
5. Freireich, E. J.: A model for evaluation of therapeutic agents in patients with acute leukemia. The effect of 6-mercaptopurine on duration of steroid-induced remissions. Proc. Amer. Ass. Cancer Res., 1961, **3**, 226.
6. Frei, E., and others: Studies of sequential and combination antimetabolite therapy in acute leukemia: 6-mercaptopurine and Methotrexate. Blood, 1961, **18**, 431.
7. Karon, M., Freireich, E. J., and Frei, E., III: Preliminary report of vincristine sulfate—a new active agent for the treatment of leukemia. Pediatrics, 1962, **30**, 791.
8. Freireich, E. J., Frei, E., III, and Karon, M.: Methylglyoxal bis(guanylhydrazone): a new agent active against acute myelocytic leukemia. Cancer Chemother. Rep., 1962, **16**, 183.

V. HORMONAL THERAPY IN BREAST, PROSTATE AND UTERINE CANCERS

MORTIMER B. LIPSETT, M.D.

HISTORICALLY the modern treatment of cancer originated at the end of the 19th century when radiation was first used in cancer and when ovariectomy was first tried in metastatic breast cancer. In fact, it was suggested that ovariectomy be applied to patients with metastatic breast cancer in 1888. The first ovariectomy was performed in 1896, and in the following ten years there was a report of therapeutic oöphorectomy in 100 patients with metastatic breast cancer, with a 40 per cent remission rate. Thus this mode of therapy is not really very new.

But perhaps more interesting is that the philosophy underlying the trial of ovariectomy at that time was really no different than the current rationale for the use of ovariectomy and other measures that I shall discuss. Namely, it was observed that the growth and function of the normal breast depended to a significant extent on the ovary, and it was reasoned that since metastatic breast cancer partook at least in part of the characteristics of the normal breast tissue, perhaps it too would be responsive to removal of the ovary, and therefore ovariectomy was performed. At this time the concept of hormones was still in the future.

There are approximately 60,000 new cases of breast cancer per year in this country. Depending on the criteria, about one-quarter to one-third of these are inoperable when first seen. The survival curve in figure 1 has been compiled from the survival rates of patients with operable breast cancer reported by five teaching hospitals. The five-year survival is only slightly better than 50 per cent; with one-third to one-quarter of the patients being inoperable and only 50 per cent surviving at five years, the magnitude of the problem of metastatic breast cancer is formidable.

The only area of unanimity in planning treatment for the patient with metastatic breast cancer is that in the premenopausal patient the ovary should be rendered nonsecretory. We prefer ovariectomy to radiation castration because of the speed and certainty with which ovarian secretion is interrupted. Oöphorectomy has consistently yielded a remission rate varying between 35 to 50 per cent. This is also the only area in which we have good evidence that removal of a particular secretion is affecting the growth of the tumor. In figure 2 evidence is presented for such an effect.

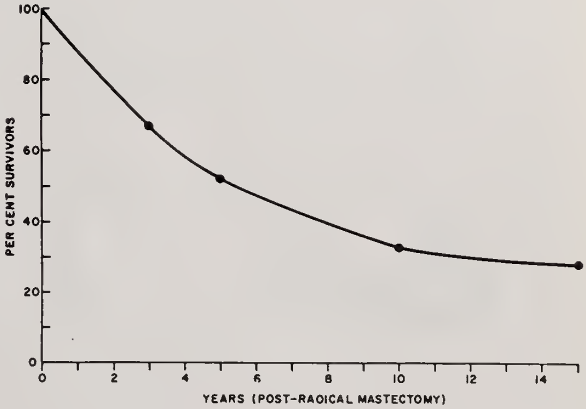


FIG. 1. Survival curve of patients with operable breast cancer.

The patient whose data are charted in figure 2 had metastatic breast cancer involving bone with osteolysis and a high excretion of urinary calcium. The normal urinary calcium excretion averages between 50 and 120 mg. per 24 hours. She was followed throughout a menstrual period. As the secretion of estrogen changed during the menstrual cycle, the urinary calcium changed in parallel. When bilateral oöphorectomy was performed there was a rapid drop in urinary calcium. This is significant because in no other situation will oöphorectomy produce a drop in urinary calcium of this type; in fact, it may result in a slight increase in urinary calcium excretion.

Subsequently, this patient received progesterone, which had no effect. However, 0.15 mg. of ethinyl estradiol per 24 hours produced a rapid rise in urinary calcium excretion and an increase in serum calcium, and the patient developed pain. When the estrogen was discontinued the patient went into remission. The rapid increase in calcium excretion following the administration of ethinyl estradiol indicates, if not an acceleration of growth of cancer, at least an acceleration of that particular metabolic facet of tumor metabolism that results in osteolysis.

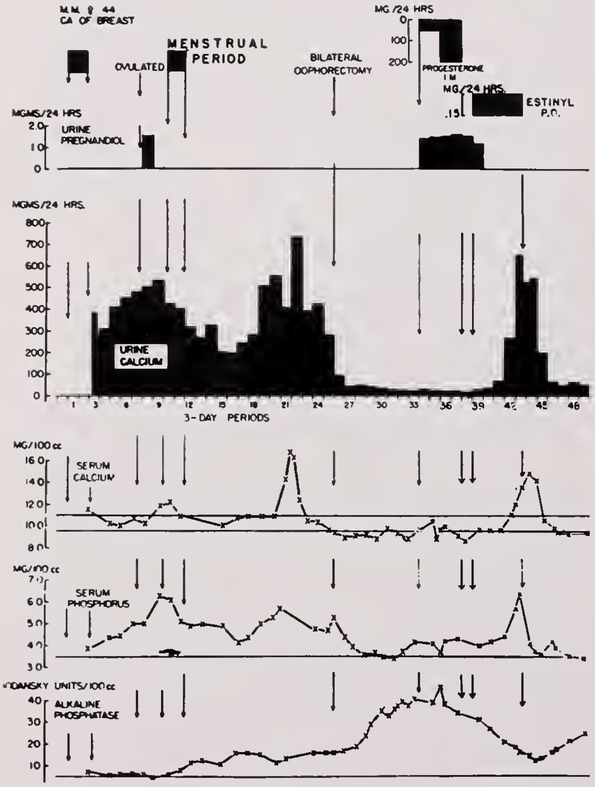


FIG. 2. Effect of oöphorectomy and estrogen administration on osteolysis.

This sort of study has been duplicated in many young women who have had oöphorectomy for metastatic breast cancer, and only those patients who have responded to oöphorectomy have demonstrated this type of response to estrogens.

It should be emphasized that the use of estrogen as a provocative test is an investigative tool almost entirely and probably should not be used in any attempt to predict response. The young woman with functioning ovaries and metastatic breast cancer should have an ovariectomy. The length of remission following ovariectomy has averaged about nine months, with a few patients going as long as two or three years before recurrence of disease.

I am unable to discuss the question of prophylactic oöphorectomy in women with breast cancer because there are too few data to permit one to conclude whether or not this operation should be performed. I hope that with coöperative studies at a number of centers, within the next few years we will be able to tell a patient with breast cancer whether prophylactic oöphorectomy should be done. The patients should be studied randomly and due attention given to such variables as location of the primary, histologic aspects, and regional node involvement.

Since estrogens had been shown to affect the activity of metastatic breast cancer, it appeared possible that removal of estrogens derived from the adrenal gland might have some effect. There were also many experimental data showing that the normal and the lactating breast are greatly influenced by growth hormone and prolactin derived from the anterior pituitary gland. These considerations suggested the possibility that removal of the adrenal glands or the anterior pituitary gland might achieve an effect similar to oöphorectomy in metastatic breast cancer. Both procedures have been done, and remissions have been achieved. The length of these remissions has averaged about nine months.

In spite of the considerations that led to the trial of these palliative procedures the effects of adrenalectomy and hypophysectomy have not been explained as yet by the removal of the hormones produced by these glands. Figure 3 shows one attempt to stimulate osteolytic activity in the hypophysectomized patient. This patient responded to ovariectomy by a decrease in urinary calcium excretion and healing of lytic lesions. One year later, because of reactivation of disease, hypophysectomy was performed with a similar response. Urinary calcium again fell to below 100 mg. per 24 hours.

of regressions identical. The duration of life after adrenalectomy or hypophysectomy was the same.

It should be noted that both of these procedures increased the range of useful and comfortable life as well as increased the duration of life.

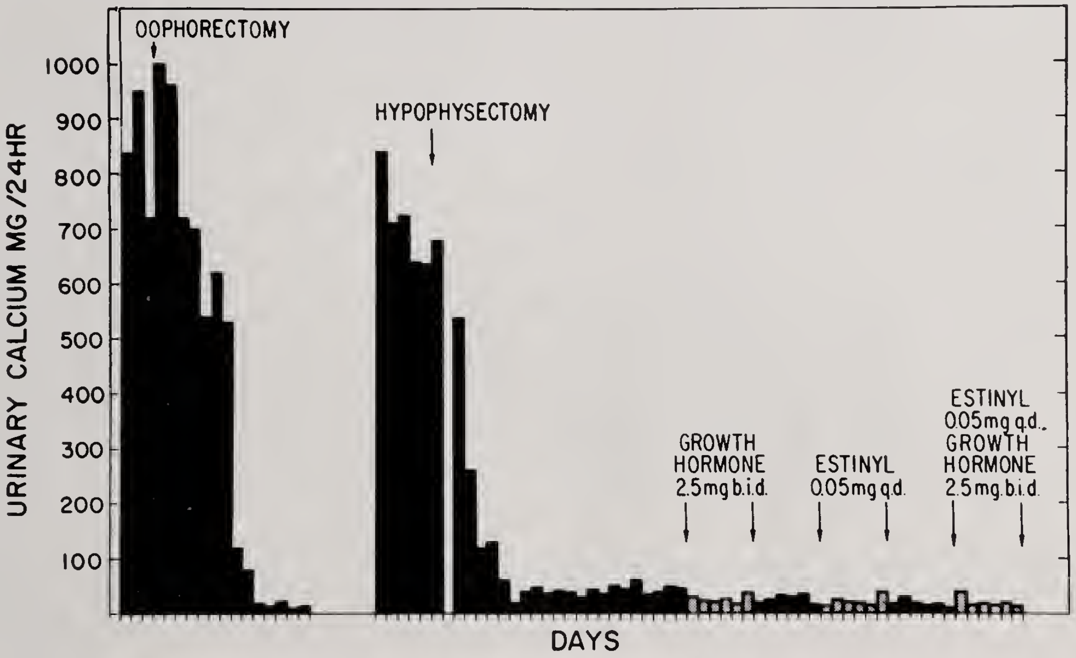


FIG. 3. Lack of effect of human growth hormone and estrogen on tumor osteolysis. Reprinted by courtesy of Cancer Research.[1]

Neither human growth hormone, ethinyl estradiol, nor a combination of growth hormone and ethinyl estradiol produced an increase in urinary calcium excretion. This is not conclusive evidence that these hormones were not involved in the response to hypophysectomy, since it may take a longer period of administration of these hormones to reactivate disease. Nevertheless, neither after hypophysectomy nor after adrenalectomy has it been possible to produce the same effects as those shown after oöphorectomy in figure 2.

With regard to the choice of adrenalectomy or hypophysectomy, the accumulated figures from the report of the Committee on Endocrine Ablative Procedures of the American College of Physicians and the American College of Surgeons are pertinent.[2] The mortality of each procedure was about 9 per cent, and the percentage

In view of the data presented, either adrenalectomy or hypophysectomy can be recommended, depending on the interest of the particular group of surgeons and internists concerned with the care of the patient. It is as easy to manage a patient after adrenalectomy as after hypophysectomy; in either case, the patient can be restored to essentially good health.

The gonadal hormones and their congeners have been widely used in metastatic breast cancer. Androgens were used in breast cancer because it was known that testosterone was, in a certain sense, antiestrogenic. The use of androgens has produced remissions of the order of 20 per cent.

Figure 4 presents the incidence of remissions achieved with androgens and estrogens in a rather large series of patients with metastatic breast cancer studied by a coöperative group.[3] Generally, estrogen produced a slightly better percentage of remissions than androgen. Only in the young person, either premenopausal or early menopausal, is androgen the drug of choice.

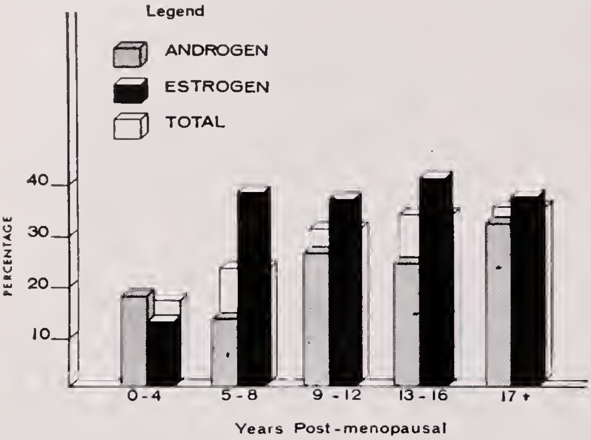


FIG. 4. Incidence of remissions in metastatic breast cancer with estrogen and androgen. Reprinted by courtesy of J.A.M.A.

Furthermore, the side-effects of estrogen administration, salt and water retention, and uterine engorgement are less distressing to the average patient than the virilization which almost inevitably accompanies effective androgen administration.

Furthermore, the remissions achieved with estrogen are somewhat longer than those achieved with androgen, so that with the exceptions noted estrogens are the agents of choice. Either estrogen or androgen can activate or accelerate the progression of disease, and therefore the patient must be carefully followed.

To summarize the sequence of therapy, there is a strong consensus that oöphorectomy should be performed in the woman with functional ovaries. When relapse occurs following remission, the gonadal hormones may be tried, but my own recommendation at this point is either adrenalectomy or hypophysectomy.

The postmenopausal patient, however, may first be treated with estrogen. After either failure or response, some patients will then respond to androgen. After the trial of both agents the patient may still respond to either adrenalectomy or hypophysectomy, so that these maneuvers should be reserved in the postmenopausal patient until therapy with estrogens or androgens has been shown to be ineffective. It should also be pointed out that the simple cessation of therapy with the gonadal hormones may result in a brief remission.[4]

One should briefly mention the role of corticoids in the treatment of metastatic breast cancer. They do cause remissions, generally of a subjective nature, and often much shorter than with these other modes of therapy. There are no good hypotheses about their mode of action, but on occasion soft tissue lesions can shrink and lytic lesions recalcify.

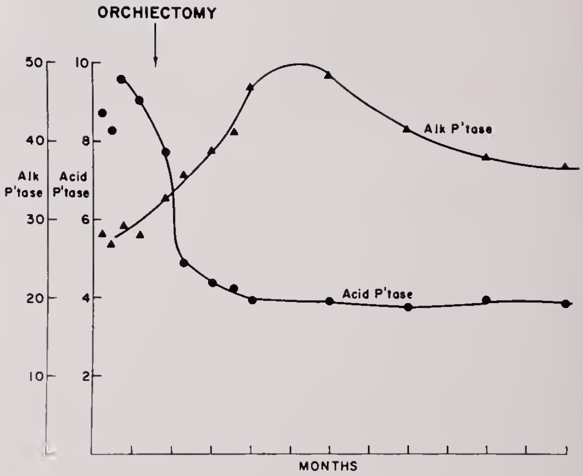


FIG. 5. Response of acid and alkaline phosphatase to orchiectomy in patient with metastatic carcinoma of the prostate.

Male breast cancer represents only 1 per cent of breast cancers. Endocrine therapy here too produces significant remissions. The response to orchiectomy may be quite dramatic, and in a small series[5] two-thirds of the patients responded to orchiectomy with durations of remission over one year. How the effect of orchiectomy is mediated is unknown. It may be removal of testosterone; this has not been proven. It may equally

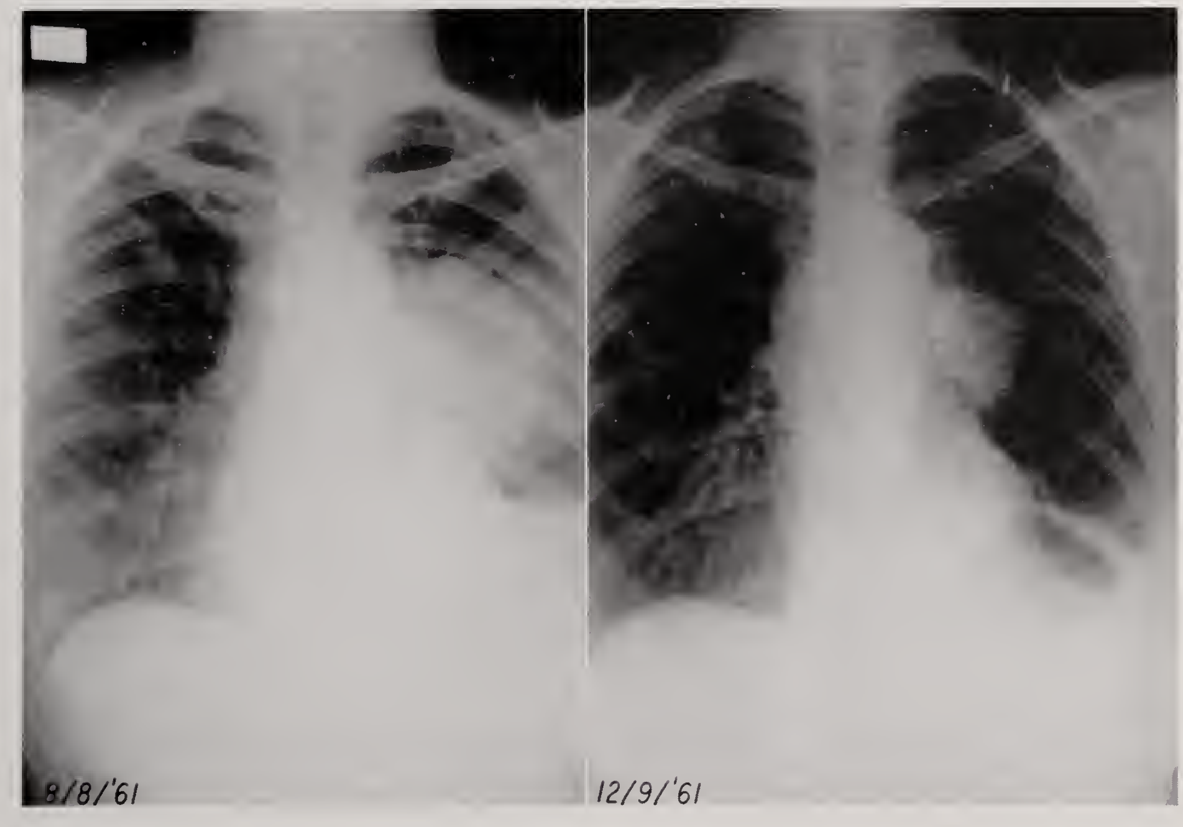


FIG. 6. Decrease in pulmonary metastases of uterine adenocarcinoma four months after administration of an oral progestin.

well be removal of estrogen which is produced by the human testis.

Prostatic cancer is another example of a cancer arising in an organ whose growth is influenced by hormonal factors. The treatment of prostatic cancer originated in basic biologic observation of the effects of androgen on the weight of the prostate gland. It was noticed that the weight and maturation of the gland depended in large part on the presence of a testicular hormone. It was then shown by Huggins[6] that, following orchiectomy, the prostate stopped secreting acid phosphatase and that testosterone restored the secretion of the prostate to normal. On these bases orchiectomy was performed in patients with metastatic cancer with the implied hypothesis that prostatic cancer responded to the same hormonal stimuli as the normal tissue.

Figure 5 portrays a characteristic response of many patients with metastatic prostatic cancer involving bone. The serum acid phosphatase was high initially because of production of this enzyme by the tumor, and the serum alkaline phosphatase was increased because of the osteoblastic response of bone to the slowly growing metastases.

Orchiectomy was performed; the acid phosphatase fell toward the normal range; the alkaline phosphatase rose at first as bone repair increased at an accelerated rate and subsequently slowly decreased. This type of response has been seen in 60 to 70 per cent of patients with metastatic prostatic cancer. The duration of remission has been 12 to 16 months, and there have been many long-term remissions. One can achieve the same effect to a very large extent with estrogen, and whether one should use orchiectomy, estrogen, or a combination of both rests on some rather equivocal statistical evidence. The data suggest that orchiectomy should be performed.

After relapse has occurred following either castration or estrogen administration, further therapy is generally disappointing. Occasional good results have been reported with hypophysectomy or adrenalectomy, but the length and percentage of remissions obtained do not recommend these procedures.

A third type of cancer that has responded dramatically to hormones is adenocarcinoma of the uterine endometrium.[7] It is known that progesterone causes maturation of the glands of the endometrium, and it was shown during the early investigative phase of progesterone action that if continued long enough it will result in atrophy of the endometrium. Progesterone and its congeners have produced remissions in 30 to 60 per cent of patients with metastases. Figure 6 portrays the effect of an oral progestational agent on pulmonary metastases.

The length of these remissions is unknown, since the mode of therapy is rather new. It is apparent that the hormones should be continued for long periods of time, since objective regressions of disease may occur only after many months of therapy. From the viewpoint of cancer chemotherapy it is significant that remissions can be achieved in metastatic cancer by agents that are essentially free of side-effects.

In summary, hormonal control of metastatic cancer is just one aspect of the entire problem of the humoral control of orderly growth. The relation of the study of the factors influencing normal growth to the treatment of cancer is apparent. We must understand the humoral mechanisms which affect or control the growth of normal tissue in order to be able to utilize these mechanisms effectively in managing cancer originating from these tissues.

REFERENCES

1. Lipsett, M. B., and Bergenstal, D. M.: Lack of effect of human growth hormone and ovine prolactin on cancer in man. Cancer Res., 1960, **20**, 1172.
2. Joint Committee on Endocrine Ablative Procedures in Disseminated Mammary Carcinoma: Adrenalectomy and hypophysectomy in disseminated mammary carcinoma. J.A.M.A., 1961, **175**, 787.
3. Subcommittee on Breast and Genital Cancer (AMA): Androgens and estrogens in treatment of disseminated mammary carcinoma. Ibid., 1960, **172**, 1271.
4. Kaufman, R. J., and Escher, G. C.: Rebound regression in advanced mammary carcinoma. Surg. Gynec. Obstet., 1961, **113**, 635.
5. Treves, N.: Treatment of cancer, especially inoperable cancer, of male breast by ablative surgery (orchiectomy, adrenalectomy, and hypophysectomy) and hormone therapy (estrogens and corticosteroids). Cancer, 1959, **12**, 820.
6. Huggins, C.: Prostatic secretion. Harvey Lect., 1946, **42**, 148.
7. Kelley, R. M., and Baker, W. H.: Progestational agents in treatment of carcinoma of endometrium. New Engl. J. Med., 1961, **264**, 216.

Current Developments in Penicillin Therapy and Hypersensitivity*

HARRY G. STEINMAN, Ph. D.
MICHAEL W. BRANDRISS, M.D.
Bethesda, Maryland

ALMOST FROM THE INCEPTION of modern bacteriology there have been many observations on antagonism between microörganisms, together with the suggestion that the active principles responsible for these antagonisms might be useful in the treatment of infectious diseases. Pyocyanase, an extract prepared from *Pseudomonas aeruginosa*, was used in the clinical treatment of infections as early as 1899. Penicillin was first isolated from a culture of *Penicillium notatum* by Fleming in 1929, but it was not until 1940 when, as a part of a broad study on microbial antagonists, crude extracts of Penicillium cultures were found to protect mice from streptococcal and staphylococcal infections with little apparent toxicity. This unusual systemic activity kindled interest in penicillin, and clinical trials soon followed, with dramatic results.[1]

The special position of penicillin in the history of bacterial chemotherapy is based on the fact that it was the first substance derived from a microbial source to achieve and maintain universal recognition as a remarkably effective therapeutic agent against a variety of microorganisms. Despite the unprecedented discoveries of new chemotherapeutic agents in the past 20 years, penicillin remains the most widely used of the antibiotics because of its high biologic activity and its very low inherent toxicity. Although many antibiotics of microbial origin have a complex chemical structure, the structure of penicillin is simple enough to permit direct chemical synthesis, thus establishing that antimicrobial agents occurring in nature are not uniquely different from those synthesized in the laboratory.[2]

Mechanism of Action

Penicillin exerts its antibacterial action by interfering with cell-wall synthesis. It was observed early that penicillin acted only on multiplying cultures, and that, under the impact of penicillin, bizarre morphologic forms were often produced, including cells completely devoid of cell wall (protoplasts). These, however, are osmotically fragile and survive only in hypertonic media. It was eventually noted that an unusual amino acid-containing nucleotide accumulated in penicillin damaged cultures of *Staphylococcus aureus*. With the elucidation of the unique chemical composition of the cell walls of gram-positive bacteria like *S. aureus*, it became clear that the peculiar nucleotide arising from the action of penicillin resulted from interference of the biochemical transfer of a specific portion of this material into new cell-wall structure.[3] Thus the failure of new cell-wall formation caused by penicillin leads to aberrant structure and eventual destruction.

Penicillin Resistance

One of the problems that became apparent with the widespread use of penicillin was the emergence of strains of staphylococci resistant to the antibacterial effect of the drug. These are considered to be descendants of naturally occurring resistant strains which received a selective advantage over the more common sensitive strains when penicillin was introduced into their environment. The basis of their resistance is the ability to produce the enzyme penicillinase which hydrolyzes penicillin to an inactive form (figure 1). Some mutants of nonpenicillinase-producing staphylococci also display resistance to penicillin, but this appears to be of little clinical significance since such strains are characterized by diminished pathogenicity and have rarely been encountered in man.

---

* From the Laboratory of Clinical Investigation, National Institute of Allergy and Infectious Diseases, National Institutes of Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

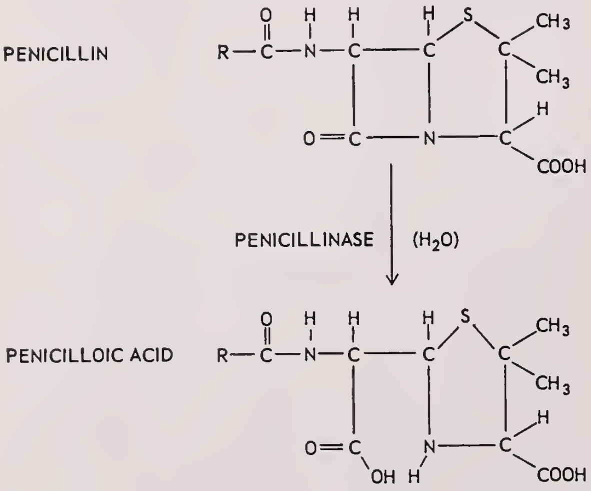


FIG. 1. Action of penicillinase on penicillin.

In 1943 it was realized that more than one type of penicillin was present in the crude preparations available at the time, and soon thereafter it was demonstrated that the type and the amount of penicillin produced were governed by the strain of fungus, the composition of the medium, and the conditions of the culture. By 1945 four molecular species (penicillins F, G, K and X) had been well characterized, and by 1959 several hundred different penicillins were prepared, mainly by biosynthetic procedures consisting of adding various side-chain precursors to the fermentation cultures. These various penicillins are all characterized by the identical 6-aminopenicillanic acid nucleus and differ only in the side chains attached to this nucleus (figure 2). These preparations were found not only to differ greatly in their activity against a standard organism but also to display striking specificity in their relative chemotherapeutic effects against a spectrum of organisms. However, it was found that none of the clinically useful preparations was refractory enough to destruction by staphylococcal penicillinase to make it useful in the treatment of resistant staphylococcal infections.

A major recent advance was the discovery of commercial methods of preparation of the 6-aminopenicillanic acid nucleus, which made possible the introduction of novel side chains by simple chemical means. Thus a wide variety of new penicillins was obtained. In 1960 a penicillinase-resistant compound, 2,6-dimethoxyphenylpenicillin was prepared. This penicillin is hydrolyzed by staphylococcal penicillinase at a rate about 200 times less than that of benzylpenicillin.[4] This degree of increased resistance is sufficient to allow it to exercise its antibiotic function in the presence of penicillinase and renders it an effective drug in the treatment of resistant staphylococcal infections.[5] Another recent preparation, 5-methyl-3-phenyl-4-isoxazolylpenicillin, has a similar degree of resistance to penicillinase and, in addition, is acid-stable enough to permit oral administration.[6] Other penicillins with similar properties are under current experimental investigation and more will undoubtedly be prepared as information is gained about the structural configurations that confer these desired properties.

SPECTRUM OF ACTIVITY

Another limitation of penicillin is its selective antimicrobial activity which is largely confined to gram-positive bacteria and treponemas. An interesting compound prepared by the new semisynthetic procedures is α-aminobenzylpenicillin, in which a modification of the side chain (figure 2) augments the spectrum of antimicrobial activity of the parent compound to the degree that it approaches those of the conventional broad-spectrum antibiotics.[7] This new broad-spectrum penicillin is not as biologically active as benzylpenicillin against susceptible gram-positive organisms but may be the prototype of more active derivatives effective against refractory gram-negative organisms.

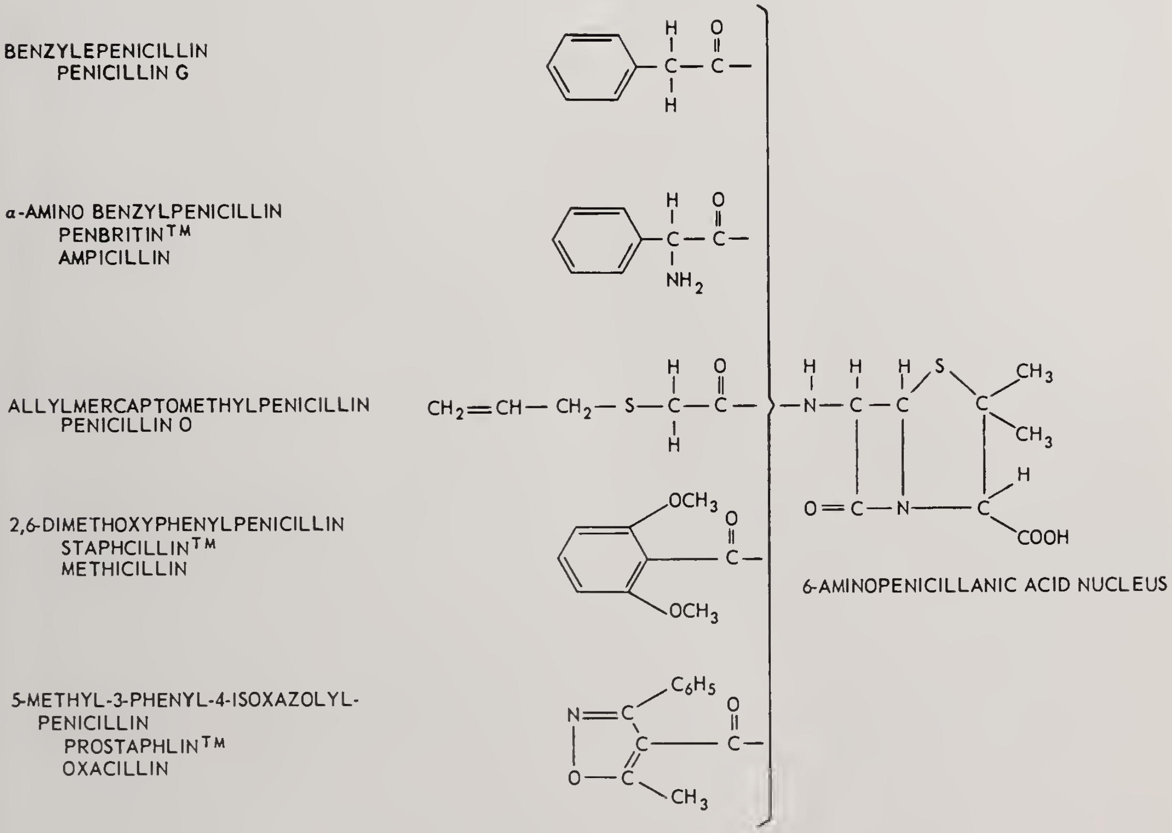

BENZYLEPENICILLIN
PENICILLIN G
α-AMINO BENZYLPENICILLIN
PENBRITIN™
AMPICILLIN
ALLYLMERCAPTOMETHYLPENICILLIN
PENICILLIN O
2,6-DIMETHOXYPHENYLPENICILLIN
STAPHCILLIN™
METHICILLIN
5-METHYL-3-PHENYL-4-ISOXAZOLYL-PENICILLIN
PROSTAPHLIN™
OXACILLIN
CH2=CH—CH2—S—
NH2
OCH3
OCH3
C6H5
CH3
CH3
CH3
COOH
6-AMINOPENICILLANIC ACID NUCLEUS

Fig. 2. Structural formulae of several penicillins.

Binding of Penicillin to Serum Proteins

The degree of binding of penicillin to serum proteins, which varies greatly with the chemical structure of the penicillin, plays an important role in the in vivo antibiotic activity of the compound. This must be taken into account when in vitro assays of activity are performed. For example, heptylpenicillin was withdrawn from clinical use despite its good in vitro activity because the inordinate degree of binding to serum albumin reduced its available concentration in serum to an inadequate level.[8] Oxacillin, although it has significantly greater activity against staphylococci in aqueous solutions than does methicillin, binds to serum protein to a far greater extent, so that this advantage is lost in 50 per cent serum and presumably in vivo. This problem is generally appreciated today, and appropriate assay methods are used to take it into account. The role of reversible binding by serum and perhaps by the tissues in prolonging the presence of antibiotically active penicillin remains to be clarified.

Allergy to Penicillin

Both toxic and allergic reactions to penicillin products were noted soon after the introduction of the early crude preparations into clinical use.

Although there was some question as to whether these reactions were due to impurities present in these amorphous preparations, the later introduction of the more pure crystalline products made it clear that the penicillin itself was responsible for the allergic reactions.

Well reasoned biochemical and immunologic experiments in the past few years have provided a better basic understanding of penicillin hypersensitivity in man. These studies have already had practical clinical application and have indicated directions for future research.

Classic immunologic studies indicated that compounds of low molecular weight (of which penicillin may be considered an example) react irreversibly with protein to form an antigen and that only those compounds that could conjugate with protein were able to sensitize or elicit an allergic reaction. Because there was no evidence that penicillin itself could undergo such a reaction at physiologic pH, it was postulated that some metabolite or derivative of penicillin was responsible for its antigenicity.[9, 10] This led to the study of penicillenic acid (figure 3-II), a rearrangement product of penicillin that is formed under physiologic conditions and was expected to have the required properties of protein conjugation and antigenicity.

Levine's studies[10] on contact sensitivity in guinea pigs with penicillin, penicillenic acid and other rearrangement products of penicillin supported the possible importance of penicillenic acid as the true sensitizer. That this product did combine with certain amino acids under physiologic conditions was soon demonstrated.[11] The combination can occur by at least two major pathways involving different final structural configurations of the original penicillenic acid molecule on the protein. The preparation of such materials made possible the investigation of specific antigenic determinants of the penicillin molecule.

De Weck and Eisen[9] made the disulfide conjugate in vitro (figure 3-III) and demonstrated that it was indeed antigenic in rabbits. Later, Levine and Ovary[12] showed that rabbits injected with penicillin alone made antibody specifically directed to the other of these conjugates made in vitro, the penicilloyl-amide derivative (figure 3-IV).

On the basis of such experiments a penicilloyl-polylysine conjugate, containing this same haptenic configuration (figure 3-V) was made for use as a skin test antigen in humans.[13] Polylysine, a polypeptide, was used rather than whole protein because it was less likely to result in formation of a sensitizing compound but could, nevertheless, elicit allergic reactions. The very promising results of the first large scale trial with this material are described below. Trials are now being conducted in other clinics, and it appears that this product may be most useful in the prediction of allergy to penicillin in man.

This approach should also facilitate the investigation of cross-reactivity between the various penicillins as well as research into the factors that enhance or restrict the allergenic potential of various penicillins. For example, the relative ability to form penicillenic acid and the ability of the various penicillenic acids to conjugate with protein might be important in regard to their potential to become antigenic. Penicillin analogues that do not form penicillenic acid as well as products that form it at widely different rates may be employed for this purpose. If the antibiotic and antigenic properties of penicillin are based on a common structural configuration, it will be impossible to have nonallergenic, biologically active preparations. If these functions are not on a common structural basis the preparation of such compounds might be achieved. These problems are under investigation in this and other laboratories.

CLINICAL CONSIDERATIONS

The more frequent types of penicillin reactions are urticaria, angioneurotic edema, serum sickness, anaphylaxis, and various dermatitides. Less frequently, purpura, Stevens-Johnson syndrome, severe hypersensitivity angiitis, and a wide variety of other reactions have been reported.[14]

In 1953 Mayer et al[15] noted that there were surprisingly few reports of anaphylaxis in the literature and collected a series of six cases of their own in a short period. In the same year Welch et al[16] surveyed 95 hospitals and found 63 anaphylactoid reactions to antibiotics, 59 of which were to penicillin preparations. An additional 25 cases were reported to them from another source for a total of 84 anaphylactoid reactions, of which 24 were fatal. In 1958, in a larger survey, the same authors recorded 793 anaphylactoid reactions with 72 deaths associated with the administration of penicillin preparations. Other less severe reactions reported were angioneurotic edema and urticaria—1,224 cases, "other dermal lesions"—319 cases, and serum sickness—65 cases. None of these had been recorded in the literature previously.[17]

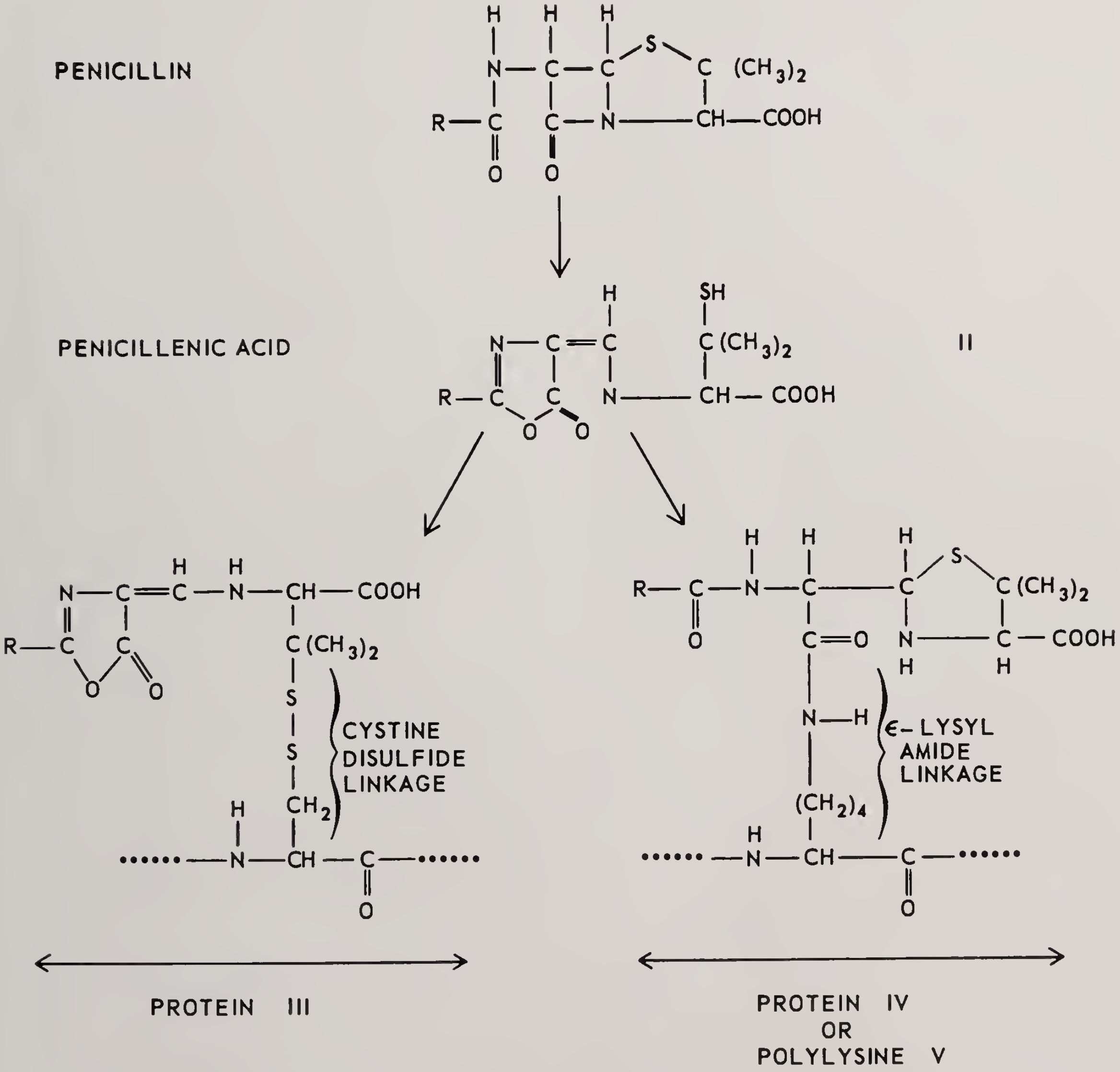

PENICILLIN
PENICILLENIC ACID
II
CYSTINE DISULFIDE LINKAGE
ε-LYSYL AMIDE LINKAGE
PROTEIN III
PROTEIN IV OR POLYLYSINE V

FIG. 3. Structural formulae of conjugation products of penicillenic acid with proteins or polypeptides.

Two other reports in the same year are notable, one reporting 30 fatal penicillin reactions from the records of the medical examiner of New York,[18] and one reporting 106 reactions in Taiwan. Seventy-four of the latter were anaphylactic with 12 deaths, while 32 were urticarial in nature.[19] These reports undoubtedly represent only a fraction of the reactions that have taken place.

An idea of the incidence of penicillin reactions in a given population may be gained from several reports. In 1954 Swift[20] noted that more than 10 per cent of patients in a clinic where penicillin was used frequently had reactions to the drug. Parker et al[13] found that 4.7 per cent of patients in a venereal disease clinic gave a history of reactions to penicillin and Smith[21] also found a 4.7 per cent incidence of a history of reaction to penicillin among military personnel. Seventy-eight per cent of these were urticarial, 18 per cent were anaphylactic, and 6 per cent were of the serum sickness type. Because those with a history of penicillin reaction do not necessarily react on a subsequent occasion when the drug is administered, the incidence of reactions observed in a given population upon a single dose or course of penicillin is expected to be lower. Heggie[22] reported an incidence of less than 1 per cent reactions in 16,000 normal recruits given benzathine penicillin, and none of these was anaphylactic. However, those with a history of penicillin allergy were apparently excluded. A recent coöperative study[23] among venereal disease clinics in this country reported an overall reaction rate of 0.97 per cent among 25,550 patients receiving a single course. Urticarial reactions accounted for 59 per cent of these, anaphylaxis for 11 per cent, and serum sickness for 4.4 per cent. A variety of reactions accounted for the remainder. The rate of delayed or less severe reactions may have been minimized in this study.

DETECTION OF THE ALLERGIC PATIENT

History. All patients for whom penicillin therapy is contemplated should be questioned for a history of sensitivity to the drug. In the coöperative venereal disease study the rate of reactions among those with no history of sensitivity to penicillin was 0.9 per cent while the rate was 11.7 per cent in those who gave a history of sensitivity. Many of the latter group were given antihistamine with the penicillin, and the incidence of reactions was 17.3 per cent if these were excluded.[23] There was no significant difference in reaction rate between those who had received penicillin without incident in the past and those who gave a history of never having had penicillin. Extrapolating from data of Parker et al,[13] also from a venereal disease clinic, one would expect a reaction rate of about 1.4 per cent in patients with no previous history of allergy and of about 30 per cent in those with a past history of allergy to penicillin. The fact that only a minority of patients who give a history of penicillin sensitivity in the past react again on any one occasion is well known. This is said to be true particularly for those who have had one urticarial reaction in the past. Nevertheless, the rate of reactions remains high enough to preclude the re-use of the drug in those with a past history of sensitivity except under special circumstances.

In addition to a history of penicillin sensitivity, a history of asthma or atopy in general may heighten the risk of a penicillin reaction. Kern and Wimberley[24] noted that five of 17 cases of fatal anaphylaxis occurred in asthmatics, while another survey reported that 26 of 84 cases of anaphylaxis occurred in patients with asthma, hay fever or other allergies, and from only 12 of the 84 had a history of penicillin sensitivity been elicited.

Skin test. Aside from the history, scratch, conjunctival or intradermal tests with penicillin have been the procedure most frequently advocated for the detection of the allergic patient. While some have been most enthusiastic about these procedures others have thought that they were of little or no value. Statistics concerning the incidence of positive tests and the reliability of positive and negative results with skin tests have varied widely, partly due no doubt to differences in the test doses used, route of administration, interpretation of results, and populations of patients tested. With the use of an intradermal test and the reading of either immediate or delayed reactions, the incidence of positive results has varied from 0 to 100 per cent. Most of the reports on these procedures concern the results of skin tests in patients who have already had a penicillin reaction, and they tend to indicate that following a systemic reaction one may expect a relatively high incidence of positive skin tests, and the more recent the reaction, the higher the incidence. Skin sensitivity to penicillin may be evanescent, and a patient with a history of anaphylaxis is not unlikely to have a negative skin test but still be a good candidate for a penicillin reaction. Although of interest, this type of data is not too helpful, since it is necessary to correlate the results of the skin test in a large population prior to the administration of penicillin with the subsequent occurrence of reactions in order to evaluate it as a prognostic test.

Smith[21] attempted a prospective study of this type among military personnel and reported a 1.8 per cent rate of positive reactions to a 300,000 unit ml. solution of penicillin employed as a scratch test and by conjunctival installation (25 of 1,365 men, of whom ten had recently had anaphylactic reactions). The positive reactors were not given penicillin except for one man who had a negative skin test and a positive conjunctival test and who died of anaphylaxis a week later after a penicillin injection by a private physician. Among a subgroup of 778 men with negative results who were then given penicillin only one had a systemic reaction and this was not severe. However, the incidence of systemic reactions in this type of group is apparently expected to be quite low if those with a history of sensitivity are excluded as indicated by the report of Heggie.[22] On the other hand, Isdoe and Wang[19] reported 26 anaphylactic reactions and 22 urticarial reactions in patients who were either scratch-tested with a 100,000 unit/ml. solution or tested intradermally with about 10,000 units of penicillin prior to penicillin administration. Only six of the 26 patients who had anaphylactic reactions had had positive tests, and five of the 22 patients who had urticarial reactions had had positive tests. None of the five patients who had fatal anaphylaxis had had positive tests, although one of these tests was probably incorrectly performed. The intradermal test gave a higher incidence of positive reactions than did the scratch test. These results indicate that a negative test cannot be relied upon to exclude even the most severe type of penicillin reactor.

Parker et al[13] recently presented another prospective study of great interest. Based on theoretical considerations and laboratory results in experimental animals (see above), 1,250 patients in a venereal disease clinic were tested with a penicilloyl-polylysine conjugate of benzylpenicillin (figure 3-V). Of those with no previous allergic reaction to penicillin, 44 of 1,191 (4 per cent) gave positive results while 45 of 59 (75 per cent) of those with a history of sensitivity gave positive results. The latter group were not given penicillin therapy. Twenty-three of the 44 patients with a negative history and a positive skin test were given penicillin, and nine had systemic reactions. Of the 1,147 patients with a negative history and negative skin tests there were no definite allergic reactions to penicillin. Of particular interest is the fact that ten of the subjects who gave a positive response to penicilloyl-polylysine were tested with intradermal penicillin and nine of these ten gave negative or at most feeble responses. Small test doses of penicillin were used, and the incidence might have been higher with larger doses. These data are impressive and seem to indicate that this is the most reliable skin-testing procedure demonstrated to date. There are reservations, however, about the applicability of this specific test reagent to other penicillins. The possible immunogenic potency of this material for humans is also questioned, although no antigenicity could be demonstrated in experimental animals. These results would also seem to confirm the poor reliability of the penicillin skin test, at least in the doses used.

Other serologic procedures (Prausnitz-Kuestner test and hemagglutination). These procedures will not be discussed in detail because they are not practical for routine clinical use. A high incidence of skin-sensitizing antibody has been demonstrated in patients who have had immediate reactions to penicillin. This procedure involves injection of the subject's serum into the skin of a normal recipient with subsequent challenge of that skin site with penicillin. To our knowledge no prospective study has been done with this technique. The necessity of having large numbers of normal recipients alone would almost preclude such a study and make routine use prohibitive.

Hemagglutinating antibody to penicillin in humans was first demonstrated by Ley et al,[25] and the finding has been confirmed repeatedly in other laboratories. Originally thought to bear no relationship to the presence of hypersensitivity, recent studies indicate that the presence of hemagglutinating antibody does bear a strong correlation with recent reactions to penicillin.[22, 26] Again, we know of no large-scale prospective studies performed with this technique. Furthermore, the presence of hemagglutinating antibody does not correlate well with the presence of positive skin tests in the same group of patients. Both of these techniques have been of interest because they have demonstrated serologic factors in humans that react with penicillin and because they afford an experimental model for the investigation of the antigenic determinants of the penicillin molecule through cross-reaction and inhibition studies. Their complexity alone makes them unsuitable for routine clinical use, and there are no data to indicate that they would be reliable in predicting the allergic patient.

Therapy of Penicillin Reactions

Parenteral aqueous epinephrine as necessary is the most important drug therapy of acute reactions. A patent airway must be assured by whatever means necessary, and mouth-to-mouth or mouth-to-airway resuscitation can be instituted with a minimum of equipment. Parenteral vasopressors such as metaraminol or levarterenol are valuable drugs for immediate use in shock, while parenteral antihistamines may also be useful, particularly in acute urticaria and angioedema. Repository epinephrine or oral ephedrine and oral antihistamines may be employed after the acute reaction is controlled and for prolonged symptoms. Steroids may be used as an adjunct to treatment in acute reactions, but are likely to be most useful in the prolonged problems of serum sickness, angiitis, and severe dermatitides.

Penicillinase. The bacterial enzyme penicillinase has been advocated for the treatment of penicillin reactions. The basis of this is the action of the enzyme in degrading penicillin to penicilloic acid, presumably rendering it nonantigenic. Penicillinase has been shown to clear the blood of humans and animals of detectable penicillin rapidly.

The more enthusiastic early reports did not represent controlled clinical trials in an adequate number of patients.[27, 28]

Minno and Davis[29] treated 32 patients and thought that penicillinase was effective but pointed out that critical analysis and prolonged use were necessary for evaluation of the drug because of the natural variability of this type of illness. They illustrated this difficulty in their own study, noting that 8 patients with moderately severe serum sickness recovered in 24 to 48 hours with placebos alone while others with urticaria did so promptly without treatment. Friedlaender[30] commented on the same difficulty. Pain, severe local swelling, tenderness at injection sites for several days, and fever are frequent complications of penicillinase therapy. More important, antigenicity in humans has been demonstrated by the appearance of positive skin tests to the preparation following therapy, and there have been several reports of severe or anaphylactic type reactions to penicillinase in humans.[31–34] This is not surprising, since bacterial penicillinase is a foreign protein and indeed might be expected to be a better antigen than penicillin itself.

Although these and other authors had the clinical impression that penicillinase may be effective in some patients we know of no well-controlled trials on significant numbers of patients that demonstrate its value clearly.

On a theoretical basis, one would expect the potential value of penicillinase to be limited, since it is expected to attack only the free penicillin molecule while the form of penicillin which is irreversibly bound to protein and is probably the true antigen would not be affected. One might predict some value in the case of depot preparations such as benzathine penicillin where the unbound drug is released into the circulation over a period of weeks or within a short time after introduction of large amounts of aqueous penicillin when rapid destruction may prevent further conjugation with body protein or further reaction in some other form, if such takes place.

Desensitization

The term "desensitization" is used only to facilitate the description of a temporary alteration in the state of reactivity to the antigen, the immunologic basis of which is unclear. Occasionally the administration of penicillin to a sensitive patient will be indicated, as in the therapy of bacterial endocarditis. With the appearance of the penicillinase-resistant penicillins more of such occasions will arise in the therapy of serious staphylococcal infections. Under these circumstances penicillin should be started in minute doses and increased stepwise with facilities provided to treat the possible reaction. Concomitant- and premedication with epinephrine and antihistamines may be advisable as a routine. Reisman et al[35] recently outlined a plan of densensitization which was used successfully and which is reproduced here (table 1). It is to be expected that while systemic and skin reactivity are temporarily absent they will recur soon after the drug is stopped. If penicillin administration were then contemplated again the same precautions would be necessary.

TABLE 1*

Drug and Dosage of Desensitization Procedure†

Time	Crystalline Penicillin G Units (IM in Deltoid)	Epinephrine HCl 1:1000 (c.c.)	Diphenhydramine
0		0.3	50 mg. (intramuscularly)
30 min.	100	0.2	
1 hr.	1,000	0.2	
1 hr., 30 min.	10,000	0.2	
2 hr.	100,000	0.2	
2 hr., 30 min.	1,000,000	0.2	
3 hr. and every 3 hr. thereafter			50 mg. (orally)
6 hr., 30 min. and every 6 hr. thereafter	1,000,000	0.2	

* From Reisman, R. E., Rose, N. R., Witebsky, E., and Arbesman, C. E.: J. Allergy, 1962, **33,** 178, with permission of the authors and C. V. Mosby Co., publishers.

† All injections were given intramuscularly in the deltoid muscle. Twenty-four hours after the onset of therapy the intramuscular injections were switched to the buttocks. Antihistamines and epinephrine were discontinued after eight days and nine days of therapy, respectively. Four million units of procaine penicillin administered intramuscularly were continued for six weeks with no ill effects.

New Penicillins

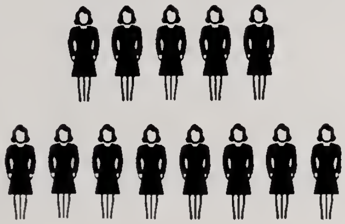
The advent of the newer penicillins with more expected in the future raises the question of potential cross-reactivity between the various preparations. We believe that all currently used penicillin preparations should be regarded as potential cross-reactors, and a history of allergy to penicillin G should be regarded for practical purposes as a history of allergy to all penicillins. It may be that a given patient who would react to one preparation might react to a lesser degree or not at all to another on a given occasion, but this cannot be predicted or assumed at the present time. Rather, the reverse should be assumed. Casual reports of the administration of one of the new preparations without incident to a patient with a history of penicillin sensitivity are of no help in this regard since only a minority of patients with a history of a penicillin reaction are expected to react to penicillin G again. Penicillin O, once regarded as "hypoallergenic," was eventually found to cross-react with penicillin G in patients previously sensitized to "G".[36, 37] Penicillin O, dimethoxyphenylpenicillin, phenethicillin, and others have all been shown to cross-react with penicillin G and to cross-inhibit with penicillin G in numerous serologic studies. The same should be assumed for all other penicillins until there is proof to the contrary.

REFERENCES

1. Abraham, E. P., and others: Lancet, 1941, **2**, 177.
2. Sheehan, J. C., and Henery-Logan, K. R.: J. Amer. Chem. Soc., 1957, **79**, 262.
3. Park, J. T., and Strominger, J. L.: Science, 1957, **125**, 99.
4. Steinman, H. G.: Proc. Soc. Exp. Biol. Med., 1961, **106**, 227.
5. Steinman, H. G., in Antimicrobial Agents and Chemotherapy—1961. Detroit: American Society for Microbiology, 1962, p. 679.
6. Kirby, W. M., Allen, J. D., Rosenfeld, L. S., and Hull, P. Q.: Ibid., p. 757.
7. Rutenburg, A. M., Greenberg, H. L., Schweinburg, F. B., and Perreault, M. A.: Ibid., p. 748.
8. Tompsett, R., Schultz, S., and McDermott, W.: J. Bact., 1947, **53**, 581.
9. DeWeck, A. L., and Eisen, H. N.: J. Exp. Med., 1960, **112**, 1227.
10. Levine, B. B.: Ibid., 1960, **112**, 1131.
11. Levine, B. B.: Arch. Biochem., 1961, **93**, 50.
12. Levine, B. B., and Ovary, Z.: J. Exp. Med., 1961, **114**, 785.
13. Parker, C. W., Shapiro, J., Kern, M., and Eisen, H. N.: Ibid., 1962, **115**, 821.
14. Guthe, T., Idsoe, O., and Willcox, R. R.: Bull. W.H.O., 1958, **19**, 427.
15. Mayer, P. S., and others: J.A.M.A., 1953, **151**, 351.
16. Welch, H., Lewis, C. N., Kerlan, I., and Putnam, L. E.: Antibiot. Chemother. (N.Y.), 1953, **3**, 891.
17. Welch, H., Lewis, C. N., Weinstein, H. I., and Boeckman, B. B.: Antibiot. Ann., 1957–1958, p. 296.
18. Rosenthal, A.: J.A.M.A., 1958, **167**, 118.
19. Idsoe, O., and Wang, P.: Bull. W.H.O., 1958, **18**, 323.
20. Swift, S.: Lancet, 1954, **267**, 602.
21. Smith, V. M.: New Engl. J. Med., 1957, **257**, 447.
22. Heggie, A. D.: Ibid., 1960, **262**, 1160.
23. Brown, W. J., Simpson, W. G., and Price, E. V.: Public Health Rep., 1961, **76**, 189.
24. Kern, R. A., and Wimberley, N. A., Jr.: Amer. J. Med. Sci., 1953, **226**, 357.
25. Ley, A. B., and others: Science, 1958, **127**, 1118.
26. Harris, J., and Vaughan, J. H.: J. Allergy, 1961, **32**, 119.
27. Becker, R. M.: Antibiot. Ann., 1957–1958, p. 310.
28. Zimmerman, M. C.: Ibid., p. 312.
29. Minno, A. M., and Davis, G. M.: J.A.M.A., 1957, **165**, 222.
30. Friedlaender, S.: J. Allergy, 1959, **30**, 181.
31. Weiss, R. C., and Crepea, S. B.: Ibid., 1959, **30**, 337.
32. Caputi, S.: New Engl. J. Med., 1959, **260**, 432.
33. Hyman, A. L.: J.A.M.A., 1959, **169**, 593.
34. Reisch, M.: Ibid., 1959, **169**, 594.
35. Reisman, R. E., Rose, N. R., Witebsky, E., and Arbesman, C. E.: J. Allergy, 1962, **33**, 178.
36. Siegal, S.: Amer. J. Med., 1951, **11**, 196.
37. Peters, G. A., Moskowitz, R. W., Prickman, L. E., and Canyer, H. M.: J. Allergy, 1960, **31**, 455.

Cancer of the Breast

Cancer of the breast is the leading cause of cancer death in women.



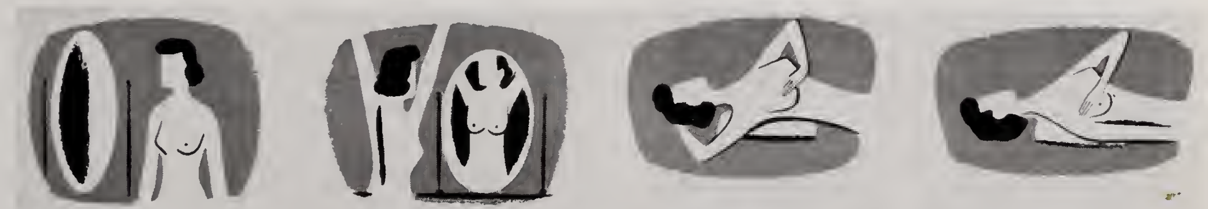
In 1963 it is estimated that there will be 64,000 new cases of cancer of the breast . . . 25,000 of these will die.

What can you do, Doctor, to help decrease this death rate?

1. Teach all of your patients to examine their breasts.
2. Include a breast examination in your annual physical examination.

95% of all breast cancers are discovered by women themselves.

You Can Obtain
Leaflets on "Breast Self-Examination" for Your Patients



Step I **Step II** **Step III** **Step IV**

A film, "Cancer of the Breast: Problem of Early Diagnosis" is available for showing to physicians.

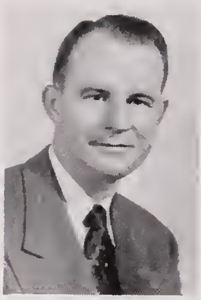
Call or Write

AMERICAN CANCER SOCIETY
District of Columbia Division, Inc.
810 - 18th Street, N.W.
Washington 6, D.C.
EXecutive 3-3690

RESEARCH
EDUCATION
SERVICE

PRESIDENT'S PAGE

TO THE MEMBERSHIP



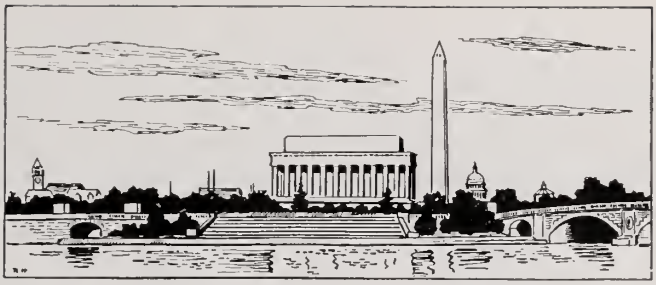
This, my last President's Page, I shall use to express my sincere appreciation to the entire membership for your coöperation, understanding, loyalty, and support during my term as your 95th President.

To the 406 committee members and their chairmen, I am deeply indebted. The importance of these committees cannot be overemphasized. Our success or failure in solving many of our problems originates in these committees. They are the fact-finding arm of our Society and their recommendations have considerable influence on the decisions of your Executive Board.

It has been my unique pleasure to serve with two outstanding Executive Directors during the past year. Their dedication and experience have been a great help to me. To them and their most efficient staffs, I give thanks.

The time and effort required to fulfill the duties of this office are more than compensated for by the honor and satisfaction of serving. For having had this privilege I am humbly grateful.

J Spencer Dryden



EDITORIALS

Dr. Hussey Accepts New Post

Dr. Hugh Hudson Hussey, or H[3] as he sometimes signs memoranda, has had a distinguished medical career as teacher, clinical investigator, writer, administrator and medical statesman, as the appended abbreviated biographical sketch testifies. He has been associated with Georgetown University School of Medicine since graduation from that school in 1934. Your Editor, when he was Chairman of the Department of Medicine, had the privilege of working closely with him until 1945. Following internship and a fellowship in internal medicine under your Editor, Hugh was his first assistant in teaching as Instructor in Medicine, serving half time at the Gallinger Municipal Hospital, now the District of Columbia General Hospital. He is a born teacher, lecturing and demonstrating with great lucidity. As with all good teachers he fathomed the minds of the students and took one step at a time in the most easily understandable terms. All the while he was studying and adding to his store of knowledge. He engaged in clinical investigation and published papers of value. Having a keen mind he later became a good administrator and a wise medical statesman. All who knew Hugh in those early years knew that he was "going places."

We congratulate the AMA on getting Hugh to accept the high position on its staff in Chicago of Director of Scientific Activities, but we shall sorely miss him on the local scene.

The following are some of the highlights of Dr. Hussey's career.

HUGH H. HUSSEY, M.D.
Director of Scientific Activities, AMA

Dr. Hussey was born in Washington, D. C., November 12, 1910. Two years after receiving his medical degree, *magna cum laude*, he entered private practice as a family physician. The same year, 1936, he began his teaching career at Georgetown, which has continued without interruption. When he became full-time Associate Professor of Medicine in 1950, he limited his private practice to consultation in internal medicine. He became, successively, Chairman of the Department of Preventive Medicine in 1953, Chairman of the Department of Medicine in 1956, and Dean of the School of Medicine in 1958. He will continue his affiliation with Georgetown as consultant and adviser in medical education.

After becoming a member of the Medical Society of the District of Columbia in 1936 Dr. Hussey contributed his valuable services to the Society in many ways, through membership on committees and the Executive Board, before national duties made him curtail some of these activities. He served as delegate to the AMA House of Delegates from 1950 to 1956, when the House elected him to the Board of Trustees. He was elected Vice Chairman of the Board in 1960 and Chairman in 1961, and was reelected Chairman in June, 1962.

In his new post Dr. Hussey will administer the programs of seven departments, namely, Foods and Nutrition, Drugs, Medical Physics and Rehabilitation, Medical Education and Hospitals, Nursing, the Scientific Assembly of the AMA, and Advertising Evaluation.

He is the author of 56 scientific publications, many of them dealing with disorders of the peripheral vascular system or, more recently, with medical education. He served on the Editorial Board of the MEDICAL ANNALS OF THE DISTRICT OF COLUMBIA from 1940 to 1956. He gained national prominence in the field of medical writing while Medical Editor of GP from 1951 to 1959.

Dr. Hussey holds a Presidential appointment as a member of the Board of Regents of the National Library of Medicine. He is a diplomate of the American Board of Internal Medicine, a Fellow of the American College of Physicians, and a member of many other scientific organizations.

Dr. Hussey and his wife, Wilhemina Gude Hussey, have one son, John Christopher Hussey, who is a student at Trinity College in Hartford, Conn. Their home is in Fort Sumner Hills in Montgomery County, Md.

W. M. Y.

Role of Cigarette Smoking in the Causation of Disease

During the past decade many surveys with extensive follow-up studies have been made by various groups in an endeavor to determine the association between cigarette smoking and disease. This has aroused considerable interest as well as much controversy. A definite relationship between cigarette smoking and various forms of chest disease has been established.

The Board of Regents of the American College of Chest Physicians, realizing that the medical profession must take the initiative in alerting the public to the dangers of cigarette smoking, unanimously passed the following resolution to that effect, June 22, 1962, during the 28th Annual Meeting of the College in Chicago:

> "WHEREAS, The weight of scientific evidence distinctly indicates that cigarette smoking and the inhalation of other atmospheric pollutants have an association relationship which strongly suggests a causal connection with chronic bronchitis, pulmonary emphysema, cor pulmonale, cardiovascular diseases and cancer of the lung, and
>
> "WHEREAS, There is increasing scientific evidence that viruses and other agents still to be defined may play a role in the etiology of cancer; therefore
>
> "Be it resolved, That the Board of Regents of the American College of Chest Physicians urge all of its members and the medical profession in general to intensify their educational campaign directed toward the public in general and the youth in particular relative to the health hazards of smoking, and
>
> "Be it further resolved, That the American College of Chest Physicians encourage the control of atmospheric pollution, and
>
> "Be it further resolved, That the American College of Chest Physicians support endeavors in the field of research for additional scientific information concerning other etiologic agents, and
>
> "Be it further resolved, That a copy of this resolution be presented to the House of Delegates of the American Medical Association and to the Surgeon General of the United States Public Health Service."

The College Committee on Lung Cancer has for a number of years been studying the effect of cigarette smoking on the respiratory and cardiovascular systems. Sufficient evidence has been accumulated to convince the members of the

Board of Regents that the above statement is warranted. Members of the College and readers of *Diseases of the Chest* throughout the world will take cognizance of the message incorporated in this resolution and adopt all necessary measures to put these recommendations into practice.

As a member of the Board of Regents of the College, and as a delegate to the House of Delegates of the American Medical Association, representing its Section on Diseases of the Chest, I was asked to introduce this resolution to the House of Delegates of the AMA during its Annual Meeting in June. The resolution was referred to the Council on Drugs for consideration; furthermore, the Board of Trustees of the AMA has instructed the Council to conduct a study on the relationship between tobacco and disease. A preliminary report from the Council is expected within a period of 12 to 18 months.

Surgeon General Luther L. Terry, of the United States Public Health Service, has informed the American College of Chest Physicians that an expert advisory committee is to be established to study and make recommendations on the health aspects of smoking and that the College resolution would be referred to that committee.

J. WINTHROP PEABODY, SR., M.D.

The Medical Service Reporter

The first issue of a newsletter from Medical Service of D. C. arrived in all doctors' offices the first week of November. *Medical Service Reporter* will be published monthly and edited by none less than Theodore Wiprud.

The first issue is good, concise, and to the point. It provides information, answers questions, and includes a bit of guest editorial comment. So if you have questions about the local Blue Shield Plan, send them to Mr. Wiprud, G. H. I. Building, 14th and L Streets, N.W., Washington 5, D. C.

How Many People Have Lived?*

How many people have ever been born since the beginning of the human race?

What percentage does the present world population of three billion represent of the total number of people who have ever lived?

These questions are frequently asked the Population Reference Bureau's Information Service. Because of the perennial interest and because of the credence sometimes given to what would seem to be unrealistic appraisals, this issue presents an estimate prepared by Fletcher Wellemeyer, Manpower, Education and Personnel Consultant, Washington, D. C., with Frank Lorimer of American University, Washington, D. C., acting as advisor. This estimate, based on certain statistical, historic and demographic assumptions set forth in an appendix, should be regarded as no more than a reasonable guess. It assumes that man first appeared about 600,000 years ago, a date which has been proposed for the dawn of the prehistoric era. However, this date obviously is a compromise, anthropologically speaking, between varying extremes.

Since then it is estimated that about 77 billion babies have been born. Thus, today's population of approximately three billion is about 4.0 per cent of that number.

Absolutely no information exists as to the size and distribution of prehistoric populations. Presumably they were not large, nor very widely distributed. If the 600,000 B.C. date is accepted as a sound compromise, then only about 12 billion people—less than one sixth of the total number ever born—are estimated to have lived before 6,000 B.C.

Anthropologists and paleontologists differ by hundreds of thousands of years as to when man first walked this earth. Recent discoveries strongly suggest that the life-span of the human species might date back as much as two million years. However, this time-scale has not yet been accepted by all anthropologists.

---

* Reprinted from *Population Bulletin*, February 1962, by permission from Population Reference Bureau, Inc., Washington, D.C.

If the "beginning" actually extended a million years prior to 600,000 B.C., the estimated number of births prior to 6,000 B.C. would be 32 billion, and the estimated total number, about 96 billion.

Prior to 1650, historical population data are very scanty for every part of the world. Despite this lack of knowledge, ancillary evidence exists which reveals the general pattern of human growth. Throughout the thousands of centuries which preceded the present technological age, human survival was such a touch-and-go affair that high fertility was essential to balance brutally high mortality. The human female—a relatively slow breeder, even among mammals—had to reproduce somewhere near her physiological limit in order for the family, the clan, the tribe and the nation to survive.

As human culture developed over the ages, the chances of survival tended to improve. When the invention of agriculture provided a more stable food supply, the base was laid for the maintenance of large populations and for their spread into new areas. However, high death rates continued to check population growth.

Until recently, at least a half of all babies born died before reaching maturity. Man's quest for some formula to avert death included magic, incantations and prayers, but none of these had shown any efficacy against the major killers. Then, with the advance of modern science, the mortality pattern of a million years was broken.

Jenner's dramatic discovery of vaccination for smallpox was the first of a multitude of discoveries destined to defer death, especially in infancy and childhood. This brilliant application of the scientific method to biology and medicine, together with improved agricultural technology, better transportation and the vast and complex nexus of an emerging industrial culture, set in motion forces which drastically lowered death rates and thereby greatly increased the efficiency of reproduction. In some countries the birth rate declined also, although more slowly than the death rate. During the 19th century the industrial countries of the West were the first to experience the transition from high to low birth and death rates. This transition took about 150 years.

These epochal changes profoundly altered the patterns of survival and population growth. In those countries of northern Europe and North America which were the first to exploit effectively the new medical discoveries, life expectancy at birth rose rapidly from 30 years to 40, then to 50, and, by 1960, to 70 years and more. Infant mortality declined drastically: now, 95 out of every 100 babies born in Western industrial countries live to reach adulthood.

Although the power to defer death is one of the greatest advances in man's long history, it has been the principal factor in the acceleration in the rate of population growth during the past century. Now, public health programs reach even the world's most remote villages, and death rates in the less developed areas are falling rapidly. But the traditionally high birth rates—so essential to offset the high death rates of even the very recent past—remain high. Thus, population growth soars.

Therefore, over the long span of history, the rate of population growth has tended to accelerate—almost imperceptibly at first; then slowly; and recently, at a rapid clip. By the beginning of the Christian era, 200–300 million people are believed to have lived on earth. That number had grown to some 500 million by 1650. Then the growth curve took a sharp upward trend. By 1850 world population was more than one billion. Today it is over three billion.

The quickening tempo of growth is even more dramatically expressed in doubling time. It took hundreds of thousands of years for world population to reach the quarter-billion mark, at about the beginning of the Christian era. Over 16 centuries more passed before that number reached an estimated half-billion. It took only 200 additional years to reach one billion, and only 80 more years—to about 1930—to reach two billion. Population growth rates are still going up. During all of the eons of time—perhaps as long as two million years—the human race grew to its present total of three billion. But it will take only 40 years to add the next three billion, according to United Nations' estimates. In certain nations and larger areas, populations will double in 25 years or even less, if growth rates remain unchanged.

Extension of Dependents' Medical Care Identification Cards*

The retention of certain servicemen beyond their normal date of expiration of active duty tours has been directed by the Secretary of Defense. Implementation poses many problems. Among them is the valid identification of the extendees' dependents who will remain eligible for certain benefits while their sponsors remain on active duty.

The extension of tours of duty may result in some dependents being without a valid Identification Card for some time. The basis of identification of dependents is, as you know, the Uniformed Services Identification and Privilege Card (DD Form 1173). Each card carries an expiration date of eligibility. This date, in the case of dependents of non-career personnel, is the same as the expected expiration date of the sponsor's tour of active duty.

In the past the "expiration date" on the ID Card has been the governing factor in determining that eligibility still exists. Since the involuntary extension of the tours of duty of many servicemen is effective almost immediately, the probability exists that some still-eligible dependent wives and children may apply for civilian medical care to which they are still entitled. They may not, however, have in their possession the required proof of their eligibility.

No change is contemplated in the provision of our contract which states that claims may not be processed for payment until the dependents have proven their eligibility to receive care. Service personnel will be advised that it is their responsibility to take necessary action to "update" the evidence of dependents' eligibility.

It is most probable, however, that some dependents will be in need of authorized medical care from civilian sources prior to the time this action has been completed. In such cases, the dependent has been instructed to explain the situation to the physician and hospital authorities. They have been advised to present, if available, some tangible evidence, such as allotment checks, official orders, directives, or personal letters which state the pertinent facts to the physician or hospital to help support the dependent's claim of continued eligibility.

This office is not empowered to broaden the "good faith" aspect of our contract. The number of dependents temporarily "unidentified" who require medical benefits will not be large.

In view of the situation at hand, physicians and hospitals are encouraged to exercise patience and understanding during the next several months when their services are requested by dependents of these extendees.

I must emphasize, however, that no claims may be processed for payment unless the dependent has provided a valid DD Form 1173 or a statement of eligibility as required by our contract.

Colonel Bryan C. T. Fenton, MC, USA
Executive Director, Office for
Dependents' Medical Care, Office of the
Surgeon General, U. S. Army

---

* Editor's note: The information contained above was included in a letter of October 31, 1962, to the Secretary of the Medical Society of D. C.

Pension Plans for Physicians under the New Keogh Law

EUGENE F. ROESSER, LL.B.*

Washington

EDITOR'S NOTE: The Insurance Committee of the Medical Society of the District of Columbia has been actively at work for some time in the development of a plan of savings meeting the requirements of the Keogh Law. Because of the mass purchasing power of the Society, the benefits that can be made available may be most attractive. A group program for Society members is under consideration by the Executive Board at this time.

THE SELF-EMPLOYED INDIVIDUAL'S TAX RETIREMENT ACT OF 1962—popularly called the Keogh Law—is effective for taxable years beginning after December 31, 1962. It must be emphasized that this new law will be implemented with certain rulings by the U. S. Treasury Department. The best course of action to take to set up a plan in many individual cases will not be clear until these rulings are issued. It must also be emphasized that the provisions of the law are highly complex (some 20 sections of the Internal Revenue Code are amended), and competent professional help in deciding whether to set up a plan, method of funding, etc. is essential.

The Act permits a physician to deposit 10 per cent of his net earned income from self-employment up to a maximum of $2,500 per year in a pension plan. He then secures a current tax deduction for one-half of his deposit. Physicians electing to establish a plan for themselves must also set up a plan for all full-time employees with more than three years' service. In general, contributions on behalf of employees must be in the same proportion of their income as his contribution for himself bears to his income. His contributions for employees are fully tax-deductible. They must be fully vested in the employee and therefore an employee retains these funds upon termination of employment.

Deposits may be made in any of the following broad categories of investment media:

1. *Retirement Income, Annuities and Life Insurance Policies.* It is expected that the Treasury rulings will be broad enough to permit use of existing insurance. It is also expected that ordinary life and other forms of insurance combining death benefits and savings will be permitted, but the proper cost of the death benefit portion of the policy will not be allowed. This cost will probably be determined in tables issued by the Treasury Department similar to those now used in Corporate Pension Plans.

The effect of the Treasury rulings on insurance will be of the greatest practical importance to many physicians, because if the rulings are issued as expected many physicians will be able to use existing insurance to which they are already committed for annual premiums in full or in part toward this pension. The word "annuities" in this paragraph includes face-amount certificates as defined in the Investment Company Act of 1940.

2. *Mutual Funds.* Deposits in such funds must be made with a bank as custodian, an arrangement many companies have had for some time for the systematic accumulation of funds.

3. *Trust Funds.* The trust fund may be invested in individual common stocks, bonds, and other investments. The trustee must be a bank unless a trust invests only in annuity, endowment, or life insurance contracts, but a person other than a bank may be granted under terms of the trust instrument the power to control the investment of trust funds.

4. *Government Bonds.* A new series of nontransferable Government bonds, complying with certain specific provisions, is authorized by the Act. Rate of interest will be fixed by the Treasury Department.

An important collateral advantage of all pension plans is the accumulation of earnings on funds invested on a tax-free basis during the participants' working years. This results in a faster compounding of the assets in the fund.

Pension benefits must be paid out to the physician commencing before age 70½. They may be paid out in a number of ways, including a payment over a period up to the life expectancy of himself and his spouse. Taxation provisions of benefits received are complex, but in general all income attributed to the tax-deductible portion of funds deposited is taxed at ordinary rates. Funds withdrawn in lump sum after age 59½ are taxed as ordinary income by use of an averaging formula which bars pyramiding of lump sum distributions into tax brackets excessively high for the particular individual. The capital gains treatment in certain lump sum withdrawals in corporate plans is not available to the physician, but it is available to his employees included in the plan.

---

* Mr. Roesser is an insurance broker and financial consultant to physicians with 13 years' experience in this field. He holds a B.A. degree in economics from Loyola University (California) and an LL.B. degree from Georgetown University. He is a member of the D. C. Bar. He is a Chartered Life Underwriter and is a member of the 1962 Million Dollar Round Table.

The purpose of the Law is to provide retirement funds for the self-employed. Therefore, a penalty is imposed if the retirement fund is distributed before age 59½ for reasons other than disability or death. The penalty is such as to not discourage the physician of modest means from setting up a plan for fear that he may need the deposits before retirement, and yet payment of the tax and penalty on such funds will discourage use of these funds for any purpose other than a real emergency.

A number of Washington physicians are covered under pension plans of medical schools, hospitals, and corporations which are based on salaries received from these sources, and in addition maintain a private practice. They may set up a plan under this law covering their private practice income. The spouse of some physicians is also self-employed. In such cases both may set up a plan.

It is obvious that many factors must be considered by the individual physician before he decides to set up a plan. His current tax bracket as against his expected tax bracket at retirement is a most important consideration, since it must be remembered that tax must some day be paid before these funds become "spendable" funds. There is little incentive to enter the plan, therefore, unless he is reasonably certain that his tax bracket at retirement will be lower. The cost after taxes of funding the plan for employees is another major consideration. These factors and other personal factors should be considered by the physician with his professional advisors.

This Law is a disappointment to many because the benefits in general are substantially less than originally anticipated. It offers little to a great number of physicians, but it is a beginning, and there is every reason to believe that it will become more liberal over the years. In the meantime, it offers a very real present opportunity for many other physicians to provide for later years on a favorable tax basis.

Second Interstate Scientific Assembly

THE SECOND INTERSTATE SCIENTIFIC ASSEMBLY, co-sponsored by the Medical Societies of the District of Columbia and Virginia at the Sheraton-Park Hotel, concluded three full days devoted to the exposition of new developments and modern techniques in the practice of medicine, October 17. The registration of 2,188 included more than 1,200 physicians, which the Committee on Arrangements felt was only a fair attendance for such a splendid program and did not come up to the attendance figures of the first joint ASSEMBLY in 1954.

Dr. C. Willard Camalier, Jr., General Chairman, and Dr. James M. Moss, of Alexandria, Va., Co-chairman, worked diligently all through the year to complete arrangements. They were ably assisted by the chairmen and members of the various subcommittees and by the administrative staffs of the two Societies.

Credit for the excellent scientific presentations goes to the Program Committee, headed by Dr. Bernard J. Walsh (D. C.) and Dr. Owen Gwathmey (Va.), Chairman and Co-chairman, respectively.

From applications for the Scientific Exhibit, 36 were selected by Dr. Alvin C. Wyman (Va.) and Dr. Jed W. Pearson (D. C.) and their committee. The three prize-winning exhibits were:

First: "Premature Craniosynostosis" — Drs. Franklin L. Angell, Edgar N. Weaver, and John A. Martin, of Roanoke, Va.

Second: "Air Splints—For Emergency Treatment of Fractures"—Dr. E. D. Vere Nicoll, Charlottesville, Va.

Third: "Nitrous Oxide Gynecography" — Dr. Christopher J. Murphy, Jr., Dr. Alvin C. Wyman, and Jean DeVries, R.N., Alexandria (Va.) Hospital.

1962 HONOREES OF D. C. MEDICAL SOCIETY

DR. J. SPENCER DRYDEN (second from right), President of the Medical Society of the District of Columbia, is shown above with those who received citations at the Annual Dinner held in connection with the SECOND INTERSTATE SCIENTIFIC ASSEMBLY at the Sheraton-Park Hotel, October 16. They are (left to right): DR. DANIEL L. FINUCANE, who received the Society's Certificate for Meritorious Service; DR. HERBERT P. RAMSEY, who was awarded a plaque by the A. H. Robins Company for outstanding community service; DR. DRYDEN; AND MR. NATE HASELTINE, who received a special citation from the Society for his excellent reporting of medical news.

A Certificate of Merit was awarded to Drs. Jack J. Rheingold, Edward Adelson, Arnold A. Lear, Gordon S. Letterman, and Maxine A. Schurter, of Washington, for their exhibit on "Hereditary Hemorrhagic Telangiectasia: Surgical Management of Epistaxis."

The medical motion pictures were selected and scheduled by a committee jointly chairmanned by Dr. Joel B. Hoberman (D. C.) and Dr. Wallace Baker (Va.).

As usual, the social events added color and good fellowship to the meetings. There were several alumni and specialty society luncheons each day, as well as breakfast meetings for early risers. The George Washington University Medical Alumni Luncheon drew a large audience to hear Commissioner George P. Larrick, of the Food and Drug Administration, give a timely address on "The Impact of New Drug Regulations on Physicians." Those who attended the Georgetown University Medical Alumni Luncheon, October 17, had the privilege of hearing Dr. F. J. L. Blasingame, Executive Vice President of the American Medical Association, discuss some of the problems organized medicine faces today.

The social highlight of the three-day ASSEMBLY was the cocktail party and dinner on Tuesday evening. Presiding at the dinner was the President of the D. C. Medical Society, Dr. J. Spencer Dryden, who shared honors during the evening with Dr. Russell Buxton, President of the Medical Society of Virginia. Dr. Buxton presented special certificates to twelve Virginia physicians who had been members of the State Society for 50 years. Included in this group was Dr. William Otis Bailey, Sr., of Leesburg, Virginia, an Associate member of the D. C. Medical Society.

Dr. Dryden returned to the rostrum to present the Medical Society's three awards. Dr. Daniel L. Finucane, formerly Director of Public Health for the District of Columbia, was present to receive the Society's Certificate for Meritorious Service—

> "in recognition of distinguished service to his profession and the people of the District of Columbia during 31 years of dedicated service to the Department of Public Health. As Superintendent and Medical Director of Public Health he won high recognition as an administrator and a humanitarian. As a member of many Medical Society committees he used his knowledge and experience to serve both the profession and the public. To this quiet, unassuming man of courage and integrity, the Society and the community will always be indebted."

For the first time in its history the Medical Society recognized a member of the press for his lucid interpretation of medical news to the public. A special award was presented to Nate Haseltine, science writer for *The Washington Post.* Nate has been a faithful reporter at medical meetings in and around Washington for many years. His certificate read:

> "This certificate is presented to Nate Haseltine in recognition of his excellent reporting of medical and scientific news in *The Washington Post.* He has long been recognized by his colleagues throughout the Nation for his outstanding abilities as a science writer. The people of the District of Columbia are especially indebted to him for keeping them abreast of the more technical and important developments in medicine. The Medical Society presents this certificate to Mr. Haseltine as its expression of high regard for his accurate, honest and thorough reporting of medical subjects."

In behalf of the A. H. Robins Company, of Richmond, Va., Dr. Dryden presented a handsome plaque to Dr. Herbert P. Ramsey "for outstanding community service by a physician." Dr. Ramsey was a member of the Board of Directors of the Hospital Service Agency from 1938 to 1942. He organized the Washington Metropolitan Health Council and served as Chairman from 1944 to 1947 during its Health and Hospital Survey of the Washington Metropolitan Area. From 1948 to 1961 he was a member of the Hospital Advisory Council to the D. C. Government. In 1960 he was elected Chairman of the Council and reappointed for a three-year term, but resigned at the end of 1961. For this service he received a Meritorious Public Service Award from the District Commissioners on December 14, 1961.

A more recent citation, which Dr. Ramsey has added to many other honors accumulated throughout a lifetime of service to the profession and the community, was given him by the American Medical Association for his chairmanship of the AMA Committee on Blood. This citation was made on June 28, 1962. Dr. Ramsey is Past President of the D. C. Medical Society and received the Society's Certificate for Meritorious Service in 1959.

The winners in the Scientific Exhibit, noted above, received their awards at the annual dinner.

Dr. Robert L. Norment, Chairman of the Golf Committee, presented awards to winners in the golf tournament, with the first prize going to Dr. William D. Benham, of Arlington, Va., who scored 73 gross.

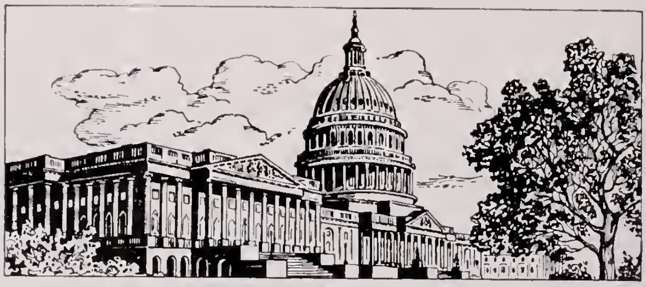
Dr. Buxton recognized Mr. George W. Cooley and Mr. Frederick E. Trust, of the D. C. Medical Society office, Mr. Robert J. Howard and Miss E. Spencer Watkins, of the Virginia office, and their staffs for their efficient handling of ASSEMBLY details.

Appreciation was also expressed by Dr. Arthur E. White (Va.), Chairman of the Committee on Social Affairs, in behalf of Dr. Marcel J. Foret (D. C.), his Co-chairman, and members of their committee to the officials of Peoples Drug Stores, who were hosts at the cocktail party preceding the dinner, and to Mr. John A. Manfuso, Jr., President of Burton Parsons Company. The latter supplied the music for dancing, which concluded a pleasant evening.

Members of Branch 1 of the American Medical Women's Association provided a hospitality room and sponsored a tea for visiting women physicians.

Two hundred and fifty Woman's Auxiliary members from Virginia and the District of Columbia attended the special events planned for wives of Virginia and Washington physicians.

Both Societies are grateful to the 80 commercial exhibitors whose continued support and financial assistance made the ASSEMBLY possible.



NEWS & PERSONALS

Meetings

The American Diabetes Association has just released the program for its **Eleventh Postgraduate Course,** "Diabetes in Review: Clinical Conference, 1963," to be held in Boston, January 16, 17 and 18, at the Hotel Statler-Hilton. The three-day course is open to physicians, with a fee of $40 for members of ADA and $75 for nonmembers. The American Academy of General Practice will give 18 hours of Category II Credit for the Course. Registration forms may be secured from the offices of ADA at 1 East 45th Street, New York 17, N. Y.

The American Medical Association is sponsoring a **Medicolegal Symposium,** to be held Friday and Saturday, March 8 and 9, 1963, at the Americana Hotel in Miami Beach, Florida. This meeting is open to all physicians interested in medicolegal problems.

Since 1955 the AMA has conducted three meetings of this type in different sections of the country. All of the meetings have been successful from the standpoint of program, attendance, and enthusiasm. For 1963, plans have been changed, and the one meeting for Miami Beach has been scheduled instead of three regional meetings.

Physicians interested in attending should notify Mr. C. Joseph Stetler, Director, Legal and Socio-Economic Division of the American Medical Association, 535 North Dearborn Street, Chicago 10, Illinois.

General News

Dr. James W. Watts, Chairman, presided at the meeting of the **Executive Board of the Medical Society of the District of Columbia** on October 29.

Dr. Karl C. Corley, President-elect, submitted the names of Drs. C. Willard Camalier, Jr., and Henry L. Darner to succeed themselves as members of the Board of Trustees of Medical Service of D. C., each for a three-year term. Dr. Alfred A. J. Den was nominated to succeed Dr. Edgar M. McPeak as a member of the same Board for a three-year term. Dr. Ralph D. Whitley was nominated to succeed himself as a member of the Board of Group Hospitalization, Inc. for a five-year term. These nominations were approved by the Board.

The names of the Nominating Committee, selected by the membership by mail vote, were read to the Board. They are: Drs. Brooks G. Brown, Philip A. Caulfield, James A. Dusbabek, O. Hugh Fulcher, Robert H. Groh, A. Magruder MacDonald, and Herbert P. Ramsey. This Committee presented the slate of officers recommended for election at the Annual Business Meeting of the Society on November 14.

The Second Annual Davidson Lecture on Religion and Medicine, sponsored by the D. C. Medical Society, November 8, was attended by almost 400 physicians, clergymen, and their guests. Dr. Erich Lindemann, Professor of Psychiatry at Harvard University and Chief Psychiatrist at Massachusetts General Hospital, Boston, gave a scholarly address on "Grief." Dr. R. Lomax Wells, Chairman of the Committee on Liaison with the Clergy, presided at the meeting. Following his address Dr. Lindemann answered numerous questions that were sent up to him from the floor.

Dr. Bela Gondos, Chief Medical Officer, Department of Radiology, District of Columbia General Hospital, advises that there is an **opening for a Medical Officer** in his department. The starting salary is $12,245 to $15,045, depending upon qualifications. Effective January, 1964, the starting salary will be $12,880 to $16,180. Dr. Gondos may be contacted by telephone at Lincoln 7-9200, ext. 539, or by letter addressed to him at the Hospital, 19th Street and Massachusetts Avenue, S.E., Washington 3, D. C.

At its meeting, October 23, the **Section on General Practice of the Medical Society of the District of Columbia** reëlected its officers. They are:

Dr. Samuel Diener, *Chairman*; Dr. Lewis A. Klein, *Vice Chairman*; and Dr. C. P. Ryland, *Secretary-Treasurer.*

An Advisory Committee on Smoking and Health was announced by Dr. Luther L. Terry, Surgeon General of the Public Health Service, October 28. Dr. Terry is Chairman of the Committee.

Dr. Stanhope Bayne-Jones, an Active member of the D. C. Medical Society, will serve as a special consultant to the Committee staff. Dr. Bayne-Jones, formerly Dean of Yale University School of Medicine, is an authority in the field of diseases related to human populations. The Committee appointees are:

Louis F. Fieser, Ph.D., Professor of Organic Chemistry, Harvard University

Emanuel Farber, M.D., Chairman, Department of Pathology, University of Pittsburgh

Maurice H Seevers, M.D., Chairman, Department of Pharmacology, University of Michigan

Leonard M. Schuman, M.D., Professor of Epidemiology, University of Minnesota School of Public Health

Charles LeMaistre, M.D., Professor of Medicine, Southwestern Medical College, Dallas

Jacob Furth, M.D., Professor of Pathology, Francis Delafield Hospital, New York, N.Y.

Walter J. Burdette, M.D., Head of Department of Surgery, University of Utah School of Medicine

John B. Hickman, M.D., Chairman, Department of Internal Medicine, University of Indiana

William G. Cochran, M.A., Professor of Statistics, Harvard University

The Committee staff is occupying quarters in the National Library of Medicine, on the grounds of the National Institutes of Health. Other specialists will be added to the staff as needed by the Committee.

In the first phase of its activity the Committee will make a comprehensive review of all available data on smoking and other features in the environment that may affect health. It is expected that this review will be completed by next summer. The second phase of the study will concern recommendations for action. However, no decision on how the latter is to be conducted will be made until the first phase has been completed.

The American Medical Writers' Association held its 19th Annual Meeting at the Sheraton-Park Hotel, Washington, October 12 and 13. At the Annual Awards Banquet, October 12, Dr. Hugh H. Hussey, Dean of Georgetown University School of Medicine and Chairman of the Board of Trustees of the American Medical Association, received the Association's "Honor Award." Dr. Hussey was cited as a "distinguished physician, teacher and educator" who "has demonstrated great qualities of leadership." The award was presented to Dr. Hussey by Colonel John Boyd Coates, Jr., MC, USA, Director of the Historical Unit of the U.S. Army Medical Service.

The "Harold Swanberg Distinguished Service Award" was presented to Dr. William D. Snively, Jr., Executive Vice President of Mead Johnson and Company, Evansville, Ind. Dr. Swanberg, for whom the award is named, presented it to Dr. Snively.

Another feature of the dinner meeting was the recognition of five medical publications for "distinguished service in medical journalism to the medical profession." The best of five categories were cited. The journals honored were: *Archives of Internal Medicine*, specialty journal published by the AMA; the *Bulletin of San Diego County* (California) *Medical Society; Medical Science*, best among "controlled circulation" journals; *New England Journal of Medicine* as best medical journal of national circulation; and the *New York State Journal of Medicine.*

Dr. Richard H. Orr, President of AMWA, presided at the Annual Dinner.

The District of Columbia Association of Medical Assistants met in the Medical Society's auditorium on November 1 for a program and business meeting. Dr. C. Willard Camalier, Jr., was present to speak on "Medical Care for the Aged—How?" Following his talk the following officers were elected, to take office on January 1: Mrs. Gloria Harper (Dr. Brooks Brown), President-elect; Miss Barbara Nowlan (Dr. John Latimer), Secretary; Miss Ruth Killian (Drs. Donald Leeper and Fofo Mezitis), Treasurer. Miss Bernadette Aukward (Dr. James Fitzgerald) will be the new President.

On November 7, Mr. George E. McGovern, Executive Vice President of Medical Service of D. C., and Mr. Theodore Wiprud, Special Assistant to Mr. McGovern, invited the new officers and several other members of the Association to a luncheon and tour of the new quarters of the Service at 14th and L Streets. Mr. Arthur Carpenter, head of the Claims Department, and Mrs. Berniece F. Sigmon, Supervisor of the same department, were present to explain some of the procedures of Medical Service, particularly from the Claims standpoint. In addition to the newly elected officers, the invited guests were Mrs. Eller Clohessy (Dr. John Bayly), who is the retiring President of the group; Miss Mary Baker (Dr. Jerome Epstein); Miss Freda Wharton and Mrs. Katharine Purdy (Dr. John Ewan); and Miss A. Louise Eckburg, Assistant Editor of the MEDICAL ANNALS.

The Hearing and Speech Center of Children's Hospital dedicated its new school for aphasic children, October 30. The school, built at a cost of $380,000, is located at 2220 11th Street, N.W., in close proximity to the Hospital. The principal speaker at the dedicatory ceremonies was Miss Mary Switzer, Director of the U. S. Office of Vocational Rehabilitation, and President of the American Hearing Society.

The Children's Hearing and Speech Center first opened a school for aphasic children in February, 1958. Enrollment in the first class was 11 children. Forty aphasic children can be taught and studied in the new classroom building, which was designed to be a demonstration center as well as a teaching facility to develop a much needed teacher training program. Research into the cause and treatment of aphasia is being conducted under a grant from the National Institutes of Health. This is the only school for aphasic children which is affiliated with a hospital.

Dr. Allan E. Walker, Jr., is Medical Director, and Dr. Max J. Fischer, Associate Medical Director, of the Hearing and Speech Center of Children's Hospital. Mrs. Edna K. Monsees is Executive Director.

The American Cancer Society inaugurated a new telephone service, **Cancer Answers**, November 15, with the coöperation of physicians who are taking part in the series. Individuals may call Service 7-8877 any time of the day or night and hear a recorded message about cancer control. All messages will be suitably presented and will close by urging the caller to get further information from his physician. The first message will be on uterine cancer. In subsequent months the message will be changed to cover other topics, such as cancer of the colon and rectum, breast cancer, etc.

The Joint Blood Council, Inc., having successfully achieved its major goal of coördination, is being dissolved as of December 31, 1962.

In 1955 the American Medical Association joined with the American National Red Cross, the American Hospital Association, the American Association of Blood Banks, and the American Society of Clinical Pathologists to form the Joint Blood Council, a nonprofit professional service organization which was needed to coördinate the existing national interests in blood. The impetus created by these member institutions assures that blood and its derivatives will be readily available in the future for all who need them. Plans are under way for each of the five component institutions to continue liaison of blood interests through advisory representatives who will meet occasionally.

The Council has been headquartered in Washington, under the direction of Dr. Frank E. Wilson, Executive Vice President, at 1500 Massachusetts Avenue, N.W.

Children's Hospital held open house for its new **Adolescent Clinic,** October 18. Special guests at the occasion were representatives from the Junior League of Washington, which has provided generous support for the Children's Hospital adolescent medicine program. An address on "The Future of Adolescent Medicine" was given by Dr. J. Roswell Gallagher, Director of the Adolescent Unit of Children's Hospital Medical Center, Boston.

The Adolescent Unit of Children's was set up as a separate entity in December, 1956. The next year an Adolescent Clinic was added to the Unit. In January, 1960 Dr. Felix P. Heald, of Boston, came to Children's as Director of Adolescent Medicine. Under his direction the program has expanded to include the training of four fellows yearly and the inauguration of a metabolic unit in which studies are conducted on obese adolescents.

Dr. Charles Prudhomme, a graduate of Howard University College of Medicine, was appointed by the District Commissioners, November 6, to its **Mental Health Commission.** Dr. Prudhomme, a Fellow of the American Psychiatric Association, is the first Negro to be appointed to this Commission.

Dr. Joseph E. Smadel, Chief of the Laboratory of Virology and Rickettsiology at the National Institutes of Health, has received the 1962 **Albert and Mary Lasker Foundation Clinical Research Award** of $10,000. He was recognized for work he did in 1948–52 when he treated typhoid fever, typhus and Rocky Mountain spotted fever with chloramphenicol, which was then a newly discovered antibiotic. The two Lasker prizes are the largest annual awards for medical research given in this country. The other, for Basic Medical Research, went to Dr. C. H. Li, of the University of California, Berkeley, for work in endocrinology. The announcement was made in New York, October 17.

Personals

Dr. Ralph M. Caulk was elected President-elect of the American Roentgen Ray Society at its meeting in Washington, October 2–5. He will succeed to the Presidency at the 1963 meeting in Montreal.

Dr. Caulk is Chairman of the Department of Radiology at the Washington Hospital Center and was President of its Medical Staff from 1957 to 1959. He is affiliated with the radiological group of Groover, Christie and Merritt, 1835 Eye Street, N.W.

Long active in organization work, Dr. Caulk was President of the Medical Society of the District of Columbia in 1956–57 and its Delegate to the American Medical Association from 1959 through 1961. He has been an officer of the American Radium Society and of the American Roentgen Ray Society. Of the latter, he was Vice President in 1950–51, a member of the Executive Council from 1956 to 1961, and Chairman in 1961. He is a Fellow of the American College of Radiology and presently a member of the Board of Chancellors.

RALPH M. CAULK, M.D.
President-elect, American Roentgen Ray Society

Dr. Daniel L. Finucane, who retired as Director of Public Health for the District of Columbia last March, has been appointed Medical Director for Prince Georges County, Maryland. Dr. Finucane headed the Section on Communicable Diseases for the County after he left the District post. He has been Acting Medical Director since Dr. Murray Grant left Prince Georges to fill the District position left vacant by Dr. Finucane.

Dr. Everett J. Gordon was elected President of the Jefferson Orthopaedic Society at its Annual Meeting in Philadelphia, October 26. This Society is composed of former graduates and residents of Jefferson Medical College who are now practicing orthopedic surgery in the United States. Dr. Gordon

MRS. JOHN E. MORRIS
President of Woman's Auxiliary

was a member of the Organizing Committee in 1959 and served as Vice President last year.

Dr. Ella Oppenheimer, who retired in May as Chief of the Bureau of Maternal and Child Welfare, D.C. Department of Public Health, was one of five District employees who were cited by the District Commissioners for outstanding accomplishments at the Tenth Annual Awards Ceremony, October 26, in the District Building.

Dr. Richard E. Palmer, of Alexandria, an Associate member of the D. C. Medical Society, is the new President-elect of the Medical Society of Virginia. Dr. Palmer, a pathologist, is a graduate of George Washington University School of Medicine and took his specialty training at the University Hospital. He will take office in the fall of 1963.

Dr. Inez Wilber, senior ophthalmologist at the Washington Hospital Center, has been elected to complete the term of Lieutenant Governor of District III of Zonta International.

At the Clinical Congress of the American College of Surgeons in Atlantic City, N. J., October 15–19, 1,100 surgeons were inducted into fellowship in the College. Six of them were members of the D.C. Medical Society. They are: **Drs. George W. Hyatt, Benjamin Jones, Jr., Nicholas P. D. Smyth, and Warren J. Strudwick,** Active members; **Dr. Nicholas M. Azzato,** of Silver Spring, Md., an Affiliate member, and **Dr. Assad S. Khoury**, an Associate member.

Membership

The following applicants for membership were duly elected to membership by the Executive Board, October 29, 1962, in accord with Chapter II, Article VIII, of the Constitution and By-laws of the Society.

Active Members

Teofanes Carreno, 7303 Hilton Avenue, Takoma Park, Md.
Jesse Frank Casey, 1025 Vermont Avenue, N.W.
William W. Funderburk, Freedmen's Hospital
Paul B. Garcia, Providence Hospital
Elisabeth K. Herz, 1025 Vermont Avenue, N.W.
Richard M. Huffman, 1834 Eye Street, N.W.
Noel A. Schweig, 2831 Ellicott Street, N.W.
William F. Sheeley, 1700 18th Street, N.W.

Affiliate Members

Clay F. Barritt, 10005 East Bexhill Drive, Kensington, Md.
Irwin S. Jaffee, 915 19th Street, N.W.

Associate Members

Stanley M. Bialek, 3413 84th Avenue, North Forestville, Md.
Mohammad Taleghani-Far, D. C. General Hospital

Resident-Intern Member

Alfred A. Leszczynski, Georgetown University Hospital

Woman's Auxiliary Notes

Mrs. John E. Morris assumed office as President of the Woman's Auxiliary to the D. C. Medical Society on July 1, 1962.

Mrs. Morris was born and reared in Baltimore. She attended Notre Dame College there and then took a course in medical technology at the University Hospital and University of Maryland School of Medicine. She was employed at Maryland General

Hospital when she met her future husband, a graduate of Emory University School of Medicine. They were married while he was in training at the New York Hospital, and moved to Washington in 1939. They have three children: a son, John, a daughter, Elizabeth, both of whom attend Duke University, and a daughter, Clare, a graduate of the University of North Carolina, who is to be married this month.

Mrs. Morris's many previous offices with the Auxiliary make her most qualified to be our President. She has been First and Second Vice President, Chairman of the Ways and Means Committee, Chairman of the Social Committee, and Corresponding Secretary. Members can certainly look to a gratifying and productive year for their Auxiliary with this gracious and capable leader guiding its activities.

The first fall meeting was held in the Library of the Medical Society on October 10. A hat fashion show followed the business meeting and a delicious luncheon was enjoyed by all. At that time a date was set for a fashion luncheon to be held on March 13 at the Mayflower Hotel. This will benefit our Nursing Scholarship Fund.

Board members of the Woman's Auxiliary entertained Mrs. William G. Thuss, National Auxiliary President, at a luncheon, October 17. Mrs. Thuss was in Washington to attend the annual meeting of the Woman's Auxiliary to the Medical Society of Virginia, which was held at the Sheraton-Park during the SECOND INTERSTATE SCIENTIFIC ASSEMBLY.

MRS. CLIFTON R. GRUVER
Publicity Chairman

Blue Shield Enrollment Passes 50-million Member Mark

THE 76 BLUE SHIELD PLANS located in North America surpassed the 50-million member mark in their enrollment as of June 30, 1962, the National Association of Blue Shield Plans announced recently.

Total membership in Blue Shield at the end of June reached 50,047,782, as a result of a net gain of 795,160 new members during the second quarter of 1962. The June, 1962 figure represents an increase of almost 2,000,000 members over the June, 1961 enrollment mark.

The National Association reported that Blue Shield now covers one out of every four Americans, and 15 per cent of the total Canadian population.

Thirteen Blue Shield Plans have enrolled more than 40 per cent of the population in the areas they serve. Among them, the District of Columbia Blue Shield Plan has enrolled four out of every five residents in that area; Rhode Island Blue Shield has more than 68 per cent of the state's population covered; Rochester, N. Y., has nearly 66 per cent of its area enrolled; and the Delaware Plan has almost 60 per cent of the state enrolled.

Three Blue Shield Plans registered significant enrollment gains during the second quarter. The Toronto Blue Shield Plan added nearly 90,000 new members during the period; Massachusetts Blue Shield reported a gain of more than 77,000 members; and the New York City Plan registered a 51,000 gain.

The National Association also noted that there were 19,798,391 contracts in force as of June 30, with the number of members per subscriber contract averaging 2.53 members.

Obituaries

EDITH SEVILLE COALE, M.D.

(1878–1962)

Dr. Edith SeVille Coale, a pioneer woman in medicine who came to be recognized as one of the leading women physicians in the United States, died, November 2, at the Washington Hospital Center. She maintained her home and offices at the Hay-Adams Hotel from 1928 until she retired, at the age of 77, in 1955, when she moved to the Presidential Apartments at 1026 16th Street, N.W.

Dr. Coale was born, January 23, 1878, in Mansfield, Ohio, of Huguenot stock. She came with her family to Montgomery County, Md., when she was 16 years of age. Her father died a few years later. Intent on becoming a physician. Dr. Coale trained as a nurse, and with the money she earned was able to finance her education at the Woman's Medical College (later merged with Johns Hopkins) in Baltimore. She graduated in 1908. For five years she served as resident physician in a mental hospital.

The practice Dr. Coale began in Washington in 1913 grew into a large one that gave her very little time for recreation. However, Dr. Coale did find time to belong to numerous professional and civic organizations, which she supported generously with both her talent and money.

She had served as medical inspector in the District schools and as clinician for the Woman's Clinic and for the District's Child Welfare staff. She organized the Medical Department of the Chesapeake and Potomac Telephone Company.

EDITH SeVILLE COALE, M.D.

She was elected to Active membership in the Medical Society of the District of Columbia in 1914 and became a Life member in 1954. She had served as Vice President of the Society and as chairman and a member of many committees. She was Past President of Branch One of the American Medical Women's Association and a member of the American Medical Association. Having spent many summers studying medicine in Vienna, she was a life member of the Medical Association of Vienna.

She was a member of the Board of Stewards of Foundry Methodist Church, Past President of the Zonta Club, a founder and member of the Huguenot Society, and a member of Esther Chapter, No. 5, Order of the Eastern Star.

She leaves no immediate relatives.

MEDICAL ANNALS OF THE DISTRICT OF COLUMBIA

VOLUME XXXI, 1962

INDEX

PAGINATION

Pages	*No.*	*Month*	*Pages*	*No.*	*Month*
1–66	1	January	379–436	7	July
67–128	2	February	437–498	8	August
129–194	3	March	499–564	9	September
195–248	4	April	565–616	10	October
249–308	5	May	617–662	11	November
309–378	6	June	663–730	12	December

SCIENTIFIC ARTICLES

'Actified-C' Expectorant: See Expectorant

Adkins, P. C., and Kelser, G. A., Jr.: Cardiac tamponade due to pericardial effusion, 499

Adrenocortical Insufficiency, clinical patterns of, (Bacchus) 249

Allergy: See Food Allergy; Hay Fever

American Psychiatry—retrospect and prospect, (Lebensohn) 379

Amphotericin B, infantile systemic histoplasmosis successfully treated with, (Reardon and Saratsiotis) 215

Anderson, R. I., and Sadun, E. H.: Some recent advances in the diagnosis of schistosomiasis, 211

Antibiotics: See Penicillin; Procaine

April, E.: Food allergy—a practical approach, 641

Armed Forces Institute of Pathology: 1862–1962, (Townsend) 565

Arsenic Poisoning, acute, electrocardiographic changes associated with, (Barry and Herndon) 25

Arterial Obstructive Disease, (Hufnagel and Conrad) 259

Avery, G. B.: Recent concepts of pulmonary hyaline membrane disease, 92

Bacchus, H.: Clinical patterns of adrenocortical insufficiency, 249

Barry, K. G.: See Beisel, W. R., jt. auth.

Barry, K. G., and Herndon, E. G.: Electrocardiographic changes associated with acute arsenic poisoning, 25

Beisel, W. R., Scalettar, R., and Barry, K. G.: Delayed vascular complications of renal biopsy; the importance of rapid processing of biopsy material, 626

Bialy, G., and Pincus, G.: Pharmacology of progesterone, 136

Biopsy, needle, of peritoneum, (Donohoe, Shnider, Uzer and Matthews) 152

Biopsy: See Renal Biopsy

Blood, coagulation: The Partial thromboplastin time (P.T.T.) as a screening procedure: preliminary report, (Weiss, Reiner and Ibanez) 140

Blood Pressure: Clinical and statistical study of effect of trichlormethiazide on blood pressure, (West) 574

Brandriss, M. W.: See Steinman, H. G., jt. auth.

Brennan, J. T.: See Frank, W., jt. auth.

Brown, H.: Ragweed repository immunization in previously untreated hay fever patients, 19

Cancer: See Carcinoma; Gastric Cancer; Ovary, tumors
  Cancer chemotherapy, symposium on: I. Hormone-producing tumors, (Hertz) 663; II. Malignant lymphoma and chronic leukemia, (Carbone) 669; III. Solid tumors, (Frei) 671; IV. Acute leukemia, (Freireich) 675; V. Hormonal therapy in breast, prostate and uterine cancers, (Lipsett) 683
  Cancer detection and care among low-income groups, determinants of acceptance to education and utilization of services for, (Whitted) 6
  Chemotherapy of malignant lymphomas and leukemias, (Gamble) 195
  Conservation surgery of the larynx, (Trible) 23
  Magic medicine for malignancy? For endocrine-dependent tumors, (Weeth) 203
  Observations on the concomitant use of X-rays and 5-fluorouracil in human malignant neoplasms, (Frank, Brennan, Newcomer and Cirksena) 12
  Perforation of malignant lesions of colon, (Thistlethwaite and Cornwell) 520
  Unsuspected hazards of oncolytic agents, (Gold and Shnider) 143

Canter, H. G.: See Masucci, E. F., jt. auth.

Carbone, P. P.: Malignant lymphoma and chronic leukemia, 669; see also Cancer Chemotherapy, symposium on, (Hertz et al) 663

Carcinoma of the Larynx, (Sweeney and Taylor) 85

Carcinoma of Lung, regression of, after chemotherapy and immune globulin, (Jamison, Fenton and Marks) 406

Cardiac Catheterization, a clinical discipline illustrated by a study of Ebstein's anomaly of the tricuspid valve, (Perloff) 342

Cardiac Tamponade due to pericardial effusion, (Adkins and Kelser) 499

Cardiac Transplantation, progress in, (Webb) 200

Chang, I. W.: Clinical trial of isopregnenone, a new progestational agent: preliminary study, 402
Children: Diseases of hip, (Schuster) 578
Chlorpropamide: See Diabetes
Cholesterol, role of, in body, (Grollman) 129
Cirksena, W. J.: See Frank, W., jt. auth.
Coates, J. B., Jr.: History of the United States Army Medical Department in World War II; concepts and current status, 30
Colon, perforation of malignant lesions of, (Thistlethwaite and Cornwell) 520
Cone, T. E., Jr.: See Pearson, H. A., jt. auth.
Conrad, P. W.: See Hufnagel, C. A., jt. auth.
Cornwell, E. E., Jr.: See Smyth, N. P. D., jt. auth.; Thistlethwaite, J. R., jt. auth.
Corrado, M. A.: See Criscitiello, M. G., jt. auth.
Criscitiello, M. G., Corrado, M. A., and Segal, J. P.: The Use of telephone transmission in the procurement of inpatient electrocardiograms: a technical study, 337
Cryptococcosis, pulmonary: report of three cases, (Thomas, McClenathan and Osborne) 77

Dermatitis: Intralesional injection of triamcinolone acetonide in localized dermatoses, (Weiner) 275
Dermatoses, topical dexamethasone in: evaluation of patient acceptance, (Gould and Olansky) 589
Dermoid Cysts, labor and delivery complicated by: report of two cases, (Van Rooy and Robins) 638
Dexamethasone, topical, in dermatoses: evaluation of patient acceptance, (Gould and Olansky) 589
Diabetes: Hepatic function of diabetic patients on chlorpropamide, (Friedman) 447
District of Columbia General Hospital, Psychiatric Department: survey of patient characteristics, treatment and disposition, (Raskin and Sullivan) 470
District of Columbia: Maternal Mortality, 1950–1959, (Fraser) 456
Donohoe, R. F., Shnider, B. I., Uzer, Y., and Matthews, M. J.: Needle biopsy of the peritoneum, 152
Drug Therapy: See 'Actified-C' Expectorant; Amphotericin B; Chlorpropamide; Dexamethasone (Hexadrol Cream, Hexadrol Tar Cream); 5-Fluorouracil; Isopregnenone (Duphaston); Oncolytic Agents; Procaine; Progesterone; Triamcinolone Acetonide aqueous suspension (Kenalog Parenteral); Trichlormethiazide
Dystrophy, muscular: See Myotonia Dystrophica

Ebstein's Anomaly: See Cardiac Catheterization
Electrocardiograms, inpatient, use of telephone transmission in procurement of: technical study, (Criscitiello. Corrado and Segal) 337
Ellinger, F.: See Lebherz, T. B., jt. auth.
Emotional Aspects of Youth Fitness, (Scanlon) 437
Endocrine-dependent Tumors: See Cancer
Expectorant, study of new, in one hundred patients, (Frohman) 155
Eye, the common viral infections of, (Magruder, Valdivieso and Wilson) 98

Falkiewicz, R. A.: Acute renal failure, 393
Favour, C. B.: See Sanders, V., jt. auth.
Fenton, E. R.: See Jamison, W. L., jt. auth.
5-Fluorouracil: See Cancer
Foley, J. D.: Procaine as an antibiotic and antifungal agent, 399
Food Allergy—a practical approach, (April) 641
Foreign Body in Knee Joint; report of case, (Gordon) 28
Frank, W., Brennan, J. T., Newcomer, K. L., and Cirksena, W. J.: Observations on the concomitant use of X-rays and 5-fluorouracil in human malignant neoplasms, 12
Fraser, C. K.: Maternal mortality: District of Columbia, 1950–1959, 456; discussion by B. Carter, 468
Freeman, W.: Lobotomy for intractable psychosomatic disorders, 1
Frei, E., III: Solid tumors, 671; see also Cancer chemotherapy, symposium on, (Hertz et al) 663
Freireich, E. J.: Acute leukemia, 675; see also Cancer chemotherapy; symposium on, (Hertz et al) 663
Friedman, A.: Hepatic function of diabetic patients on chlorpropamide, 447
Frohman, I. P.: Study of a new expectorant in one hundred patients, 155
Fulcher, O. H.: See Lipow, E. G., jt. auth.

Gamble, J. F.: Chemotherapy of the malignant lymphomas and leukemias, 195
Gastric Cancer, methods in diagnosis of, (Small) 321
Gastrointestinal Bleeding, obscure, (Latimer and Horwitz) 569
George Washington University Number of MEDICAL ANNALS (September), 499
Georgetown University Medical Center Number of MEDICAL ANNALS (June): Foreword, (Brick) 309
Gold, G. L., and Shnider, B. I.: Unsuspected hazards of oncolytic agents, 143
Gondos, B.: Roentgenographic evaluation of the size and shape of the kidney, 158
Gordon, E. J.: Foreign body in knee joint; report of case, 28
Gould, A. H., and Olansky, S.: Topical dexamethasone in dermatoses: an evaluation of patient acceptance, 589
Grollman, A.: The Role of cholesterol in the body, 129

Hayes, G. J.: See Morelli, R. J., jt. auth.
Hay Fever, therapy: Ragweed repository immunization in previously untreated hay fever patients, (Brown) 19
Heart: See Cardiac Catheterization; Electrocardiograms
  Closed chest method of cardiopulmonary resuscitation: benefits and hazards; a reprint, (Ad Hoc Com. of Industr. Med. Ass., Amer. Heart Ass., and Amer. Nat. Red Cross) 650
  The Innocent systolic murmur, (Shugoll) 71
  Progress in cardiac transplantation, (Webb) 200
  Stab wounds of the heart, (Smyth, Hughes and Cornwell) 146
Hepatic Function of Diabetic Patients on chlorpropamide, (Friedman) 447

Herndon, E. G.: See Barry, K. G., jt. auth.
Hertz, R., Carbone, P. P., Frei, E. III, Freireich, E. J., and Lipsett, M. B.: Symposium on cancer chemotherapy, 663
Hiebert, T.: See Walker, L. G., Jr., jt. auth.
Hip, diseases of, in children, (Schuster) 578
Histoplasmosis, infantile systemic, successfully treated with amphotericin B, (Reardon and Saratsiotis) 215
Hollister, J. M.: Clinically undiagnosed tuberculosis in a large general hospital, 617
Horwitz, A.: See Latimer, R. G., jt. auth.
Hospitals, communicable diseases in: See Tuberculosis
Hufnagel, C. A., and Conrad, P. W.: Arterial obstructive disease, 259
Hughes, R. K.: See Smyth, N. P. D., jt. auth.
Huycke, E. J.: Comparison of thyroidal function tests, 263
Hyaline Membrane Disease, pulmonary, recent concepts of, (Avery) 92
Hyperkalemia associated with sodium restriction, (Pearson and Cone) 81

Ibanez, R.: See Weiss, D. L., jt. auth.
Infantile Systemic Histoplasmosis successfully treated with amphotericin B, (Reardon and Saratsiotis) 215
Isopregnenone, new progestational agent, clinical trial of: preliminary study, (Chang) 402

Jacobson, M. H.: See Pateras, V. R., jt. auth.
Jamison, W. L., Fenton, E. R., and Marks, I. L.: Regression of carcinoma of the lung after chemotherapy and immune globulin, 406
Janovski, N. A.: Coëxistent unilateral Krukenberg tumor and pseudomucinous cystadenocarcinoma of the ovary, 452

Katz, S.: See Masucci, E. F., jt. auth.
Kelser, G. A., Jr.: See Adkins, P. C., jt. auth.
Kidney: See Renal Biopsy
  Acute renal failure, (Falkiewicz) 393
  Roentgenographic evaluation of size and shape of kidney, (Gondos) 158
Knee Joint, foreign body in; report of case, (Gordon) 28
Kramer, N. C.: See Pateras, V. R., jt. auth.
Krubenberg Tumor: See Ovary, tumors
Kurlander, A. B.: The Status of oral polio vaccine, 207

Labor and Delivery complicated by dermoid cysts: report of two cases, (Van Rooy and Robins) 638
Larynx, carcinoma of, (Sweeney and Taylor) 85
Larynx, conservation surgery of, (Trible) 23
Latimer, R. G., and Horwitz, A.: Obscure gastrointestinal bleeding, 569
Lebensohn, Z. M.: American psychiatry—retrospect and prospect, 379
Lebherz, T. B., and Ellinger, F.: Radiation and pregnancy, 67
Leonard, T. M.: New relief for leukorrhea, 506
Leukemia: See Cancer Chemotherapy
Leukorrhea, new relief for, (Leonard) 506
Lipow, E. G., and Fulcher, O. H.: The Split-felt plaster collar for ambulatory patients, 444
Lipsett, M. B.: Hormonal therapy in breast, prostate and uterine cancers, 683; see also Cancer chemotherapy, symposium on, (Hertz et al) 663
Lobotomy for intractable psychosomatic disorders, (Freeman) 1
Lore, J. I., Jr., and Taylor, G. W.: The Physician and the speech pathologist, 88
Lung: See Carcinoma of Lung
  Lung function tests in diagnosis, (Silver and Ohsaki) 515
  Recent concepts of pulmonary hyaline membrane disease, (Avery) 92
Lymphoma: See Cancer Chemotherapy
Lymphomas and Leukemias, malignant, chemotherapy of, (Gamble) 195

Magruder, G. B., Valdivieso, J. R., and Wilson, W. R., Jr.: Common viral infections of the eye, 98
Marks, I. L.: See Jamison, W. J., jt. auth.
Martin, M. M.: Disorders in human sex differentiation, 326
Masucci, E. F., Canter, H. G., and Katz, S.: Involuntary muscle involvement (cardiac and esophageal) in myotonia dystrophica: report of case with congestive failure and atonic esophagus and a sibling with congestive failure, 630
Maternal Mortality: District of Columbia, 1950–1959, (Fraser) 456
Matthews, M. J.: See Donohoe, R. F., jt. auth.
McAvoy, W. B., and Stanbro, W. W.: Osteopetrosis, 525
McClenathan, J. E.: See Thomas, R. C., jt. auth.
Morelli, R. J., and Hayes, G. J.: The Lesser vein of Galen: a diagnostic myth, 221
Myocarditis: Infectious and immunologic aspects, (Sanders and Favour) 310
Myotonic Dystrophica: Involuntary muscle involvement (cardiac and esophageal) in myotonia dystrophica: report of case with congestive failure and atonic esophagus and a sibling with congestive failure, (Masucci, Canter and Katz) 630

National Institutes of Health Number of MEDICAL ANNALS (December), 663
National Naval Medical Center Number of MEDICAL ANNALS (February), 67
Newcomer, K. L.: See Frank, W., jt. auth.

Obstetrics: See Labor and Delivery
Ohsaki, Y.: See Silver, H. M., jt. auth.
Olansky, S.: See Gould, A. H., jt. auth.
Oncolytic Agents, unsuspected hazards of, (Gold and Shnider) 143
Osborne, D. P.: See Thomas, R. C., jt. auth.
Osteopetrosis, (McAvoy and Stanbro) 525
Osteosclerosis: See Osteopetrosis
Ovary, tumors: Coëxistent unilateral Krukenberg tumor and pseudomucinous cystadenocarcinoma of the ovary, (Janovski) 452

Parkinsonism: Acute suppurative parotitis associated with certain drugs used in treatment of parkinsonism, (Walker, Hiebert and Smyth) 586

Parotitis, acute suppurative, associated with certain drugs used in treatment of parkinsonism, (Walker, Hiebert and Smyth) 586

Parrish, A. E.: See Pateras, V. R., jt. auth.

Pateras, V. R., Watt, M. F., Kramer, N. C., Jacobson, M. H., and Parrish, A. E.: Peritoneal dialysis in the treatment of uremia, 510

Pearson, H. A., and Cone, T. E., Jr.: Hyperkalemia associated with sodium restriction, 81

Penicillin Therapy and Hypersensitivity, current developments in, (Steinman and Brandriss) 696

Pericardial Effusion, cardiac tamponade due to, (Adkins and Kelser) 499

Peritoneal Dialysis in treatment of uremia, (Pateras, Watt, Kramer, Jacobson and Parrish) 510

Peritoneum, needle biopsy of, (Donohoe, Shnider, Uzer and Matthews) 152

Perloff, J. K.: Cardiac catheterization, a clinical discipline illustrated by a study of Ebstein's anomaly of the tricuspid valve, 342

Pincus, G.: See Bialy, G., jt. auth.

Podolsky, S.: Skull surgery by prehistoric man. Part I, 268; Part II, 409

Poisoning: See Arsenic

Poliomyelitis: Status of oral polio vaccine, (Kurlander) 207

Pregnancy: See Radiation and Pregnancy

Procaine as an antibiotic and antifungal agent, (Foley) 399

Progesterone: See Isopregnenone

Pharmacology of progesterone, (Bialy and Pincus) 136

Psychiatric Department of D. C. General Hospital: Survey of patient characteristics, treatment and disposition, (Raskin and Sullivan) 470

Psychiatry, American—retrospect and prospect, (Lebensohn) 379

Psychiatry: Emotional aspects of youth fitness, (Scanlon) 437

Psychosomatic Disorders, lobotomy for, (Freeman) 1

Pulmonary Cryptococcosis: report of three cases, (Thomas, McClenathan and Osborne) 77

Radiation and Pregnancy, (Lebherz and Ellinger) 67

Ragweed Repository Immunization in previously untreated hay fever patients, (Brown) 19

Raskin, A., and Sullivan, P. D.: The Psychiatric Department of D. C. General Hospital: a survey of patient characteristics, treatment and disposition, 470

Reardon, P. A., and Saratsiotis, J. B.: Infantile systemic histoplasmosis successfully treated with amphotericin B, 215

Reiner, M.: See Weiss, D. L., jt. auth.

Renal Biopsy: Delayed vascular complications of renal biopsy: importance of rapid processing of biopsy material, (Beisel, Scalettar and Barry) 626

Renal Failure, acute, (Falkiewicz) 393

Robins, A. I.: See Van Rooy, A. M. L., jt. auth.

Roentgenographic Evaluation of Kidney for size and shape, (Gondos) 158

Sadun, E. H.: See Anderson, R. I., jt. auth.

Sanders, V., and Favour, C. B.: Myocarditis: infectious and immunologic aspects, 310

Saratsiotis, J. B.: See Reardon, P. A., jt. auth.

Scalettar, R.: See Beisel, W. R., jt. auth.

Scanlon, J. P.: Emotional aspects of youth fitness, 437

Schistosomiasis, diagnosis of, some recent advances in, (Anderson and Sadun) 211

Schuster, G. D.: Diseases of the hip in children, 578

Segal, J. P.: See Criscitiello, M. G., jt. auth.

Sex Differentiation, human, disorders in, (Martin) 326

Shnider, B. I.: See Donohoe, R. F., jt. auth.; Gold, G. L., jt. auth.

Shugoll, G. I.: The Innocent systolic murmur, 71

Silver, H. M., and Ohsaki, Y.: Lung function tests in diagnosis, 515

Skull Surgery by prehistoric man. Parts I and II, (Podolsky) 268, 409

Small, M. D.: Methods in the diagnosis of gastric cancer, 321

Smyth, N. P. D., Hughes, R. K., and Cornwell, E. E.: Stab wounds of the heart, 146

Smyth, N. P. D.: See Walker, L. G., Jr., jt. auth.

Speech: The Physician and the speech pathologist, (Lore and Taylor) 88

Stanbro, W. W.: See McAvoy, W. B., jt. auth.

Steinman, H. G., and Brandriss, M. W.: Current developments in penicillin therapy and hypersensitivity, 696

Sullivan, P. D.: See Raskin, A., jt. auth.

Sweeney, F. J., and Taylor, G. W.: Carcinoma of the larynx, 85

Taylor, G. W.: See Lore, J. I., Jr., jt. auth.; Sweeney, F. J., jt. auth.

Tenovaginitis: See Trigger Finger

Thistlethwaite, J. R., and Cornwell, E. E., Jr.: Perforation of malignant lesions of the colon, 520

Thomas, R. C., McClenathan, J. E., and Osborne, D. P.: Pulmonary cryptococcosis: report of three cases, 77

Thromboplastin: The Partial thromboplastin time (P.T.T.) as a screening procedure: preliminary report, (Weiss, Reiner and Ibanez) 140

Thyroidal Function Tests, comparison of, (Huycke) 263

Townsend, F. M.: The Armed Forces Institute of Pathology: 1862–1962, 565

Trauma: See Heart

Traumatic Lesions of Neck: Split-felt plaster collar for ambulatory patients, (Lipow and Fulcher) 444

Trephining: See Skull Surgery

Triamcinolone Acetonide, intralesional injection of, in localized dermatoses, (Weiner) 275

Trible, W. M.: Conservation surgery of the larynx, 23

Trichlormethiazide, effect of, on blood pressure: clinical and statistical study, (West) 574

Trigger Finger in Children involving digits other than the thumb, (Wilber) 95

Tuberculosis, clinically undiagnosed, in a large general hospital, (Hollister) 617

Tumors: The Lesser vein of Galen: a diagnostic myth, (Morelli and Hayes) 221

United States Army Medical Department in World War II, history of; concepts and current status, (Coates) 30

Uremia, peritoneal dialysis in treatment of, (Pateras, Watt, Kramer, Jacobson and Parrish) 510

Uzer, Y.: See Donohoe, R. F., jt. auth.

Valdivieso, J. R.: See Magruder, G. B., jt. auth.

Van Rooy, A. M. L., and Robins, A. I.: Labor and delivery complicated by dermoid cysts: report of two cases, 638

Vein: The Lesser vein of Galen: a diagnostic myth, (Morelli and Hayes) 221

Walker, L. G., Jr., Hiebert, T., and Smyth, N. P. D.: Acute suppurative parotitis associated with certain drugs used in the treatment of parkinsonism, 586

Watt, M. F.: See Pateras, V. R., jt. auth.

Webb, W. R.: Progress in cardiac transplantation, 200

Weeth, J. B.: Magic medicine for malignancy? For endocrine-dependent tumors, 203

Weiner, M. A.: Intralesional injection of triamcinolone acetonide in localized dermatoses, 275

Weiss, D. L., Reiner, M., and Ibanez, R.: The Partial thromboplastin time (P.T.T.) as a screening procedure: preliminary report, 140

West, R. O.: A Clinical and statistical study of the effect of trichlormethiazide on blood pressure, 574

Whitted, H. H.: Determinants of acceptance to education and utilization of services for cancer detection and care among low-income groups, 6

Wilber, M. C.: Trigger finger in children involving digits other than the thumb, 95

Wilson, W. R., Jr.: See Magruder, G. B., jt. auth.

GENERAL

A

Abernethy, T. J., elected president of medical staff, Washington Hospital Center, 124

Adams, J. P., resigns from Commissioners' Professional Vocational Rehabilitation Advisory Council, 125

Alfaro, V. R., received Certificate of Appreciation from D. C. Medical Society, 53

Alpert, S., editor-in-chief, Phi Delta Epsilon *News*, 661; elected director, American Society of Anesthesiologists, 661; elected Grand Consul, Phi Delta Epsilon, 124; general chairman, ASA Committee on Arrangements (Observer), 45

B

Bateman, J. C., participates in cancer film (photo), 239

Bayne-Jones, S., appointed to Advisory Committee on Smoking and Health, PHS, 711

Beachley, R. G., honored by Northern Virginia Association for Retarded Children, 661

Benford, R. J., cited by Aerospace Medical Association, 376

Berl, M. E.: Team approach via the classroom, 238

Billet, S. L., appointed chief, D. C. Bureau of Mental Health, 562

Blake, H. S.: Blue Shield on the march, 367

Blue Cross and Blue Shield:
- Appointment: Mr. Harvey, administrator of Federal employee program, 183
- Blue Shield enrollment more than 50 million, 715
- Blue Shield on the march, (Blake) 367
- Mr. Castellucci cited by Michigan State Medical Society, 242

Books Received, Adv. (Sept.) 55; (Oct.) 39, (Nov.) 64, (Dec.) 60

Book Reviews:
- Adler, F. H., revised by: Gifford's Textbook of Ophthalmology, 7th ed., (Day) Adv. (Nov.) 28
- Alonso, E. M.: Memoirs of a Medico, (Wyman) Adv. (Apr.) 26
- Becker, B., and Shaffer, R. N.: Diagnosis and Therapy of the Glaucomas, (Egan) Adv. (Apr.) 26
- Brainerd, H., Margen, S., Chatton, M. J., and associate authors: Current Diagnosis and Treatment, (Kelley) Adv. (Sept.) 16
- Brest, A. N., and Moyer, J. H.: Hypertension—Recent Advances: The Second Hahnemann Symposium on Hypertensive Disease, (Meyer) Adv. (Apr.) 26
- Burch, G. E., and DePasquale, N. P.: Primer of Clinical Measurement of Blood Pressure, (Criscitiello), Adv. (Dec.) 26
- Cherniack, R. M., and Cherniack, L.: Respiration in Health and Disease, (Mann) Adv. (Mar.) 40
- Committee on Dietetics of the Mayo Clinic: Mayo Clinic Diet Manual, 3rd ed., (Brooks) Adv. (Dec.) 26
- Corday, E., and Irving, D. W.: Disturbances of Heart Rate, Rhythm and Conduction, (Silverberg) Adv. (Apr.) 28
- Diamond, E.: The Science of Dreams, (Price) Adv. (June) 14
- Dripps, R. D., Eckenhoff, J. E., and Vandam, L. D.: Introduction to Anesthesia. The Principles of Safe Practice, 2nd ed., (MacCordy) Adv. (Feb.) 26
- Eastman, N. J., and Hellman, L. M.: Williams Obstetrics, 12th ed., (Sheffery) Adv. (Jan.) 26
- Flippen, H. F.: Medical State Board Questions and Answers, 10th ed., (Miller) Adv. (Nov.) 28
- Florey, H., edited by: General Pathology, 3rd ed., (Rice) Adv. (June) 14
- Fluhmann, C. F.: The Cervix Uteri and Its Diseases, (Colliton) Adv. (Feb.) 26

Foote, R. R.: Varicose Veins: A Practice Manual, 3rd ed., (Madigan) Adv. (Jan.) 26
Gerletti, J. D., Crawford, C. C., and Perkins, D. J.: Nursing Home Administration—Training Materials for administrators of nursing, board and mental hygiene homes for the aged, (Ball) Adv. (Jan.) 26
Gibbon, J. H., edited by: Surgery of the Chest, (Keshishian) Adv. (Dec.) 26
Gordon, A. J., Kirschner, P. A., and Moscovitz, H. L.: Hemodynamics of Aortic and Mitral Valve Disease: Transbronchial Studies, (Kelser) Adv. (May) 14
Green, M., and Richmond, J. B.: Pediatric Diagnosis, 2nd ed., (Oberman) Adv. (Sept.) 16
Gregory, I.: Psychiatry—Biological and Social, (Malloy) Adv. (Apr.) 28
Haik, G. M., edited by: Strabismus: Symposium of the New Orleans Academy of Ophthalmology, (King) Adv. (Dec.) 26
Hogan, M. J., and Zimmerman, L. E., edited by: Ophthalmic Pathology. An Atlas and Textbook, (O'Rourke) Adv. (June) 14
Holt, L. E., Jr., McIntosh, R., and Barnett, H. L.: Pediatrics, 13th ed., (Coleman) Adv. (Oct.) 26
Huber, A.: Eye Symptoms in Brain Tumors, (Williams) Adv. (Mar.) 46
Katzin, H. M., and Wilson, G.: Rehabilitation of a Child's Eyes, 3rd ed., (Weimer) Adv. (Feb.) 26
Kolmer, J. A.: Clinical Diagnosis by Laboratory Examinations, 3rd ed., (Craig) Adv. (Jan.) 30
Kwapinski, J. B., and Snyder, M. L.: The Immunology of Rheumatism. (Hurwitz) Adv. (Nov.) 28
Leider, M.: Practical Pediatric Dermatology, 2nd ed., (Teichmann) Adv. (Jan.) 30
Major, R. H., and Delp, M. H.: Physical Diagnosis, 6th ed., (Tublin) Adv. (Aug.) 47
Martin-Doyle, J. L. C.: A Synopsis of Ophthalmology, 2nd ed., (Suarez) Adv. (Jan.) 30
McKusick, V. A., and contributors: Medical Genetics 1958–1960: An Annotated Review, (Friedman) Adv. (June) 14
McLennan, C. E.: Synopsis of Obstetrics, 6th ed., (O'Neil) Adv. (Dec.) 28
Meyer, R., Levitt, M., Falick, M. L., and Rubenstein, B. O: Essentials of Pediatric Psychiatry, (Sprehn) Adv. (Dec.) 28
Modell, W., editor: Drugs of Choice 1962–1963, (Beelar) Adv. (Sept.) 16
Netter, F., prepared by: Ciba Collection of Medical Illustrations, Volume 3. A Compilation of Paintings on the Normal and Pathologic Anatomy of the Digestive System: Part II, Lower Digestive Tract. Edited by Ernst Oppenheimer, (Steinman) Adv. (Oct.) 26
O'Donnell, W. E., Day, E., and Venet, L.: Early Detection and Diagnosis of Cancer, (Brayer) Adv. (Sept.) 18
O'Donoghue, D. H.: Treatment of Injuries to Athletes, (Epps) Adv. (Oct.) 26
Owen, J. K., and Eisleben, R. K.: Modern Concepts of Hospital Administration, (Ball) Adv. (July) 33
Pillsbury, D. M., Shelley, W. B., and Kligman, A. M.: A Manual of Cutaneous Medicine, (Barksdale) Adv. (Feb.) 28
Proceedings, Thirteenth International Congress on Occupational Health, July 25–29, 1960, (Wells) Adv. (Mar.) 40
Reid, D. E.: A Textbook of Obstetrics, (Davis) Adv. (July) 33
deReuck, A. V. S., and O'Connor, M., editors for the Ciba Foundation: Ciba Foundation Study Group No. 11. The Mechanism of Action of Water-soluble Vitamins, (Jakoby) Adv. (July) 33
Schreiner, G. E., editor: Transactions of the American Society for Artificial Internal Organs, Volume VII, (Teschan) Adv. (Feb.) 28
Soubiran, A.: Good-bye, Doctor Roch, (Kleinerman) Adv. (Jan.) 30
Tenney, B., and Little, B.: Clinical Obstetrics, (Cooper) Adv. (May) 14
Williams, R. H., edited by: Textbook of Endocrinology, 3rd ed., (Burgerman) Adv. (June) 16
Wilson, J. L., and McDonald, J. J., edited by: Handbook of Surgery, (Bloemsma) Adv. (Mar.) 40
Wolstenholme, G. E. W., and Cameron, M. P., editors for the Ciba Foundation: Ciba Foundation Study Group No. 9. Progesterone and the Defence Mechanism of Pregnancy, (Sherman) Adv. (May) 16; Ciba Foundation Symposium on Renal Biopsy: Clinical and Pathological Significance, (Maher) Adv. (Aug.) 47
Wolstenholme, G. E. W., and O'Connor, M., editors for the Ciba Foundation: Ciba Foundation Study Group No. 10. Biological Activity of the Leucocyte, (McCurdy) Adv. (May) 16; Ciba Foundation Symposium on Somatic Stability in the Newly Born, (Oberman) Adv. (May) 16
Zola, S., Long, J. A., and Caulfield, P. A., Providence Alumni Publication Committee: Providence Centennial Book 1861–1961, (Wiprud) Adv. (May) 14

Boone, J. T., honored by Mercersburg Academy, 432
Borden, D. L.: The Roll call of the Medical Class of 1912—George Washington University, 427
Brennecke, F. E.: See Epps, C. H., Jr., jt. auth.
Brigulio, A., president, George Washington University Alumni Association, presents "captain's chair" to Dr. Nordlinger (photo), 423
Buchanan, J. J., chief of rehabilitation, D. C. General Hospital, retires, 184; cited by President's and District Commissioners' Committee on Employment of the Handicapped, 375; named "Physician of the Year 1961," 561

C

Camalier, C. W., Jr., appointed co-chairman, Second Interstate Scientific Assembly, 121; elected delegate to AMA, 53; renominated to board of trustees, Medical Service of D. C., 710; see report of delegates to AMA on annual meeting, 553
Cancer Page:
Cancer of the bladder, 603
Cancer of the breast, 699

Cancer of colon or rectum, 114
Cobalt-60, 652
Gastric cancer, 52
Intracranial tumors, 366
Malignant melanomas, 234
Rectal cancer, 482
Services for your cancer patients, 426
Soft tissue sarcomas, 174
Tumors in children, 554
Tumors of kidney, 294

Castell, R. B., elected to Hall of Fame of athletes of George Washington University, 124

Caulk, R. M., elected president-elect, American Roentgen Ray Society (photo), 713

Chapman, J. E., accepts Abendroth Trophy for 115th Evacuation Hospital of D. C. Army National Guard, 373

Choisser, R. M., receives "captain's chair" from George Washington University, 423

Cohen, I. J., appointed medical director, Maimonides Hospital, 661

Comanduras, P. D., assistant executive director of Care, 183; recipient of 1962 "Health-U.S.A." award, 424; photo, 425; see editorial, 417

Conklin, C. B., deceased: See Secretary Conklin (Observer), 291

Cooley, G. W., appointed executive director and secretary, D. C. Medical Society, 163, treasurer, 429; (Observer) 289; see editorial (photo), 415; report of secretary-treasurer, 601

Corley, K. C., elected president-elect of D. C. Medical Society, 53; see delegates' report on AMA clinical meeting, 115

Correspondence: See Letters to the Editor

Cunningham, R. M., Jr.: Hospitals, doctors and dollars, 175

D

Daniels, W. B., awarded gold-headed cane by medical staff of Washington Hospital Center, 375; awarded honorary degree by Georgetown University, 431

Darner, H. L., reëlected president, Medical Service of D. C., 429; renominated to board of trustees, Medical Service, 710

Davis, E. W., awarded gold-headed cane by medical staff of Washington Hospital Center, 375; cited by Washington Heart Association, 184, (photo) 300

Dean, B. F., Jr., appointed chairman, Board of Police and Fire Surgeons (photo), 610

Den, A. A. J., nominated to board of trustees, Medical Service of D. C., 710

Dickens, P. F., receives "captain's chair" from George Washington University, 423

District of Columbia:
Appointments: Dr. Dean, chairman, Board of Police and Fire Surgeons, 610; Dr. Grant, director of public health (photo), 608; Dr. Prudhomme, to Mental Health Commission, 713; Dr. Whelton, coroner, 660
Commission on Licensure, new offices, 62
Health regulations on communicable and reportable diseases and drug control, 301, 494
Poliomyelitis vaccination, recommendations on, 166, 352; mass immunization program, 535, postponed, 598
Practical Nurses' Examining Board, activated, 183
Public Health Advisory Council, functions and activities, 655
Resignations/retirements: Dr. Adams, member, professional vocational rehabilitation advisory council, 125; Dr. Finucane, director of health, 184; Dr. MacDonald, coroner, 609; Dr. Ramsey, chairman, hospital advisory council, 125
See editorial (Finucane), 105; In and Out of Focus (Observer), 108

Doctor's Day 1962, (Mrs. R. S. Williams) 298

Dodek, S. M., honored by King-Kane Obstetrical Society (photo),555
A Report from India: the Second Asiatic Congress of Obstetrics and Gynecology, 653

Dryden, J. S., assumes presidency of D. C. Medical Society (photo), 36; presents AMA-ERF checks to deans of medical schools (photo), 240; presents plaque to Mr. Zupan (photo), 354; presides at annual dinner, Interstate Scientific Assembly, 708; with award-winners at ISA dinner (photo), 708; see President's Page

Dunn, T. B., cited by U. S. Government, 184

E

Editorials:
Ambassadors of good health, (Feffer) 285
Dr. Annis and AMA, (Cooley) 535
Basic criteria for blood transfusion, (Wilson) 164
Cancer Control—progress and hope, (Herbst) 226
Cancer and proctosigmoidoscopy, (Ault) 286
Child development clinic and assessment service, (Burke) 479
Cigarette smoking, role of, in the causation of disease, (Peabody) 702
Cooley, George, takes over. 415
Down's syndrome (mongolism), (Burke) 37
Financing the health care of the aged, (Stubbs) 478
Foreign medical school graduates, (Foley) 288
Health appraisal of our Nation's Capital, (Finucane) 105
Hospital admission fees, (Burka) 477
Hospital costs continue to rise, 536
Hospitalization, the cost of, (White) 647
How many people have lived? 703
Dr. Hussey accepts new post, (Yater) 701
Impressions of Moscow, (White) 593
"Let's give the hospital back to the patients! " (Middleton) 103
Medical Service forms, 39
The *Medical Service Reporter*, 703
"Medicine" versus "internal medicine," (Yater) 39; (Montgomery) 39
Narcotic addiction in the United States, 416
Neurotic marriage, (Ferber) 353
New approach to the older patient, (Kleh) 165
The New medical curriculum of the George Washington University, (Peery) 533

The Physician of the future, (Comanduras) 417
Poliomyelitis control, (Anderson) 352
Preservation of the patient's confidence, (Montgomery) 228
Re Ted Wiprud, 282
Risks in blood transfusion, (1961 Committee on Blood) 227
Social Security and the private practice of medicine, 225
Student opinion (on medical care under Social Security), 480
To all members, (Cooley) 477
The Trademark, 595
Two-way radio service, (Zupan) 107
Ted Wiprud's retirement as Secretary announced, (Watts) 163
Vaccination against influenza, 593
Volunteers for the polio immunization program, 535
Your office assistants, 596
Mr. Zupan accepts new post, (Wiprud) 354

Epps, C. H., Jr., and Brennecke, F. E.: Juvenile amputee program, 295

F

Farley, O. R., honored by American College of Hospital Administrators, 610

Feffer, J. J., elected trustee and chairman, Medical Service Committee, American Society of Internal Medicine, 376

Finucane, D. L., appointed medical director, Prince Georges County, 713; designee for Certificate for Meritorious Service to Medical Society, 242; recipient (photo), 708; presented Funkhouser Award by D. C. Tuberculosis Association, 376; resigns as director of health for D. C., 184, (Observer) 168, honored at reception, 243

Frohman, I. P., interviewed at AMA meeting (photo), 118

From Other Journals:
HEW grant to Harvard University for study of medical care, 536
Medical socioeconomic problems, 536
Reason for existence (of medical societies), 536

G

Gates, H. S., recipient of Robins Award, 43; photo, 46

Gant, J. Q., reëlected president, Association of Reserve Officers of U. S. Public Health Service, 60

Gibb, W. T.: Directions for the man who thinks a peptic ulcer is a status symbol, 481

Goldman, M. L., prize-winner at American Physicians' Annual Art Exhibit (photo), 561

Gordon, E. J., elected president, Jefferson Orthopaedic Society, 713

Goshen, C. E.: Lest we forget: a medical report on the Mauthausen Concentration Camp, 485

Gray, L. W., elected to board of credentials, D. C. Medical Society, 53

Group Hospitalization, Inc.: experience rating adopted, 422; nominees of D. C. Medical Society to board of trustees, 53, 55, 710

Gruver, C. R., elected alternate delegate to AMA, 53; see report of delegates to AMA on annual meeting, 553

H

"Health-U. S. A.": D. C. Medical Society appointees to executive committee, 56, to awards committee, 121; 1962 award-winners, 424, (photo) 425

Heaton, L. D., awarded honorary degree by University of West Virginia, 431

Henry, W. L., appointed to D. C. Hospital Advisory Council, 432

Herbst, W. P., Jr., elected president, American Board of Urology, 184; president, D. C. Cancer Society, presents plaque to Dr. Kerr (photo), 61; congratulates successor (photo), 484

Holden, R. T.: See reports of delegates to AMA on clinical meeting, 115, annual meeting, 553

Homemaker Service of the National Capital Area, approved by executive board of Medical Society, 301; see In and Out of Focus (Observer), 48

Hospitals:
Alexandria (Va.), branch hospital dedicated, 183; corporation members, 242
Arlington (Va.), medical staff officers, 123
Children's, grants to, 61; medical staff officers, 123; new quarters for adolescent clinic, 712; Dr. Paine appointed director, Birth Defects Center, 560; Dr. Parrott, first director, 495; Mr. Smith appointed administrator, 658; school for aphasic children dedicated, 712
Columbia Hospital for Women, renovated, 659
District of Columbia General: juvenile amputee program (Epps and Brennecke), 295; new doctors' residence, 123; Psychiatric Convalescent and Rehabilitation Service opened, 370
Georgetown: Dr. Mate appointed director, Retarded Children's Clinic, 431
Holy Cross (Silver Spring, Md.), medical advisory committee, 431
Montgomery General (Md.), accredited by Joint Commission on Accreditation of Hospitals, 123
Providence: Daughters of Charity honored by D. C. Medical Society, 43
Saint Elizabeths: Dr. Cameron appointed superintendent (photo), 658; Dr. Overholser, superintendent, retires (photo), 660; voluntary admissions to, 418
Washington Hospital Center: Dr. Curtin appointed director of research and medical education, 431; Ford Foundation lecture, 119; Lyons Memorial Fund committee, 302; medical staff dinner, 375; new trustees, 242; recipient of portable vectorcardiograph, 559; research facility, plans announced, 430

Hospitals, doctors and dollars, (Cunningham) 175

Howard, R. L., elected president, Heart Association of Northern Virginia, 496

Howell, W. A., elected to board of credentials, D. C. Medical Society, 53

Hung, W., appointed chief endocrinologist, Children's Hospital, 562

Hunter, O. B., Jr., elected treasurer, Joint Blood Council, 562

Hussey, H. H., appointed director of scientific activities, AMA (photo), 701; appointed to Commission on Drug Safety, 558; honored by American Medical Writers' Association, 711; reëlected chairman, board of trustees, AMA, 492; president, AMA Education and Research Foundation, 122; see editorial (Yater), 701

In and Out of Focus (Observer):
- AMA's Lawrence, 230
- 29th Annual Scientific Assembly, 41; cartoon, 42
- Best wishes, George (Cooley)! 289
- Drug samples, 50
- The Editor and his staff, 167; photos, 167. 168
- Effective committees, 231; cartoon, 231
- Finis, 293
- Dr. Finucane resigns, 168; cartoon, 169
- Free choice issue, 109
- Kennedy asks for action (on health insurance for the elderly), 229; cartoon, 230
- "Lazy MD" brand, 232; cartoon, 232
- ". . .A Master plan for health. . ." (Finucane), 108; cartoon, 109
- Medicine in the Congo (Sinclair), 169; cartoon. 170
- ". . .No greater force. . ."—Blue Shield Plans (McGuinness). 289; cartoon, 291
- Nursing homes and homemaker services, 47; cartoon, 48
- An Old story (Doctor vs. M.D.), 112
- Physicians on stamps (Mitchell exhibit), 113
- Secretary Conklin, 291
- Should doctors retire (*New Medical Materia*), 170; cartoon, 171
- Social Security vs. Workmen's Compensation *(J. Amer. Insur.)*, 111; cartoon, 111
- The Society seeks action (from AMA on developing prepayment medical care plans), 46; cartoon, 46; editorial by *Washington Post*, 47, by *Washington Star*, 47
- Thank you! (to officers, members and office staff), 233
- Udall rides again (removal of Dr. Rush's statue), 49
- Unlabeled bottles (Harris). 171
- War on cigarettes (*The Lancet*), 292; cartoon, 292

In and Out of Focus to the Observer: Hussey, 355; Blasingame, 355; Fishbein, 356; Lull, 356; Jackson, 356; Hendricks, 357; Price, 357; Parks, 358; Sethman, 358; Farrell, 359; Neill, 360; Sanford, 360; Weld. 360; Nelson. 360; Crownhart, 361; Waggener. 361; Perry, 361

J

Jeghers, H., honored by Georgetown University. 124

Johnson, M. T., appointed medical director. Civil Service Commission, 661

K

Kadan, J. E.: An Ode to Ted; a poem, 365

Kanof, N. M., elected second vice president, D. C. Medical Society, 53

Katz, S., cited by Veterans Administration Hospital, 62

Kenner, A. W., deceased, commemorated by Kenner Army Hospital, 374

Kenney, E. C., proposed for honorary membership in Medical Society of D. C., 57, elected, 53

Kenney, J. A., assumed presidency of National Medical Association, 609

Kenrick, M. M., appointed acting director. Department of Physical Medicine and Rehabilitation. Georgetown University, 184

Kerr, H. H., honored by D. C. Cancer Society (photo), 61

Kittredge, E., cited by American Medical Women's Association (photo), 62

Kober Lecturer for 1962 (Lebensohn). 302

Kushner, D. H., elected chairman, admissions committee, International Fertility Association. 609

L

Lattman, I., appointed chairman emeritus, Department of Radiology, Children's Hospital, 561

Laughlin, H. P., elected member of British Royal Medico-Psychological Association. 63

Lawrence, J. S.: See AMA's Lawrence (Observer), 230

Lebensohn, Z. M.. named Kober Lecturer for 1962. 302; photo, 303; see Lecture, 379

Letters to the Editor:
- Brown, W. J.: "Current Literature on Venereal Disease" available, 243
- Enlows, E. M. A.: Appreciation of Medical Society's services, 185
- Hegland, L. R.: Comments on "Medicine in the Making of Montana" (Observer), 376
- Hozier, J. B.: Physicians wanted by Public Health Service, 305
- Kailin, E. W.: Study of insect sting allergy, 377
- Korczowski, M.: Diabetic diet instruction available from Georgetown University, 244
- Matthews, C. B.: Physicians wanted by Census Bureau. 304
- Sister Margaret Eileen: Appreciation for citation to Daughters of Charity, 185
- Taine, S. I.: Bibliography of Medical Reviews, Vol. 6, 1955–61, published by National Library of Medicine. 244

Lichty, G.: Grin and Bear It; a cartoon, 606

LoPresti, J. M., appointed chief radiologist, Children's Hospital. 561

M

MacDonald, A. M., retires as District coroner, 609; cited by D. C. Commissioners (photo), 609; congratulates successor (photo), 661

Mann, M., appointed deputy coroner for D. C.. 661

Mattingly, T. W., appointed to D. C. Citizens' Traffic Board, 376; reëlected governor for D. C., American College of Chest Physicians. 562

Mauthausen Concentration Camp, medical report on, (Goshen) 485

McLendon, P. A., recipient of Certificate for Meritorious Service to Medical Society (photo), 42

Medical Bureau: See editorial (Zupan), 107

Medical Institutions for specialized care:
  School Guidance Center: Team approach via the classroom, (Berl) 238
  Woodley House—a pioneering mental health project, (Metcalf) 172; officers, 373
Medical Journals:
  Journal of Medical Education, new headquarters, 561
  West Virginia Medical: Dr. Vest, editor, deceased, 183; succeeded by Dr. Evans, 431
Medical Schools:
  George Washington University: Appointments: Dr. Parlett, professor of microbiology, 373; Dr. Sadusk, professor of preventive medicine and community health, 495; "Continuing Care Program"—plan and faculty, 656; George Washington University Number of MEDICAL ANNALS (September), 499; new medical curriculum; an editorial (Peery), 533; roll call of medical class of 1912 (Borden), 427; sponsor of TV training program on medical self-help, 370
  Georgetown: Appointments: Dr. Calcagno, chairman, Department of Pediatrics, 559; The Rev. Cohalan, S.J., vice president for medical center affairs, 561; grants received: Josiah Macy, Jr. Foundation, 430, National Science Foundation, 374, Public Health Service, 374
  Walter Reed Army Institute of Research, seminars, 59
  Washington Psychoanalytic Institute, officers, 373
Medical Self-help Training Program (WTOP-TV), sponsored by George Washington University, 370
Medical Service of the District of Columbia:
  Annual Reports: President (Darner), 419; Administrative Services (McGovern), 483; Physicians' Services Committee (Brown), 422
  Board of Trustees: electees to, 429; nominees of D. C. Medical Society, 53, 55, 710; officers, 429
  Experience rating adopted, 422
  Medical Service forms (involving private information); an editorial, 39
  Medical Service Reporter, first issue, 703
  Physician-subscribers, organization of, approved by D. C. Medical Society, 54
Medical Society of the District of Columbia:
  Annual Business Meeting, 607; proceedings of, 53; 1963 meeting, 558
  Annual Reports of officers: Chairman, Executive Board, 597; Board of Credentials, 600; Secretary-Treasurer, 601
  Annual Scientific Assembly: See In and Out of Focus, 41–6; photos, 44
  Awards, special: Daughters of Charity (photo), 43; Mr. Haseltine, 429, (photo) 708; Robins Award, 658, to Dr. Ramsey (photo), 708; Theodore Wiprud commemorative plaque (photo), 364
  Bequest Funds, list of, 308
  Boards: credentials, 189; executive, 60, 121, 182, 189, 241, 300, 372, 429, 493, 557, 657, 710, (report) 54; obstetrical, 121, 192, 558, 608; review for prepaid medical insurance, 192, 429
  Certificate for Meritorious Service, recipient for 1961 (photo), 42; designee for 1962, 242; recipient, 709, photo, 708
  Committees: personnel, 189–92; alcoholism, 300; armed forces and veterans affairs (formerly veterans affairs), 493, 557; cancer morbidity review, 556; journal (formerly medical journal exchange), 493; mental health, 558; nominating, 53, 710; occupational health (formerly industrial health), 55; public policy, 429; traffic, 180
  Constitution and By-laws, amendments to: III, proposed, 55, adopted, 53; IV, proposed, 55, adopted with amendment, 53; V, proposed, 55, adopted, 53
  Contributions: Joint Board on Science Education, 182; National Society of Medical Research, 300; Washington Convention and Visitors Bureau, 429
  Davidson Lecture on Religion and Medicine, 607; Lecturer, 710
  Delegates, American Medical Association, 189; reports, 115, 553; resolution on prepaid health insurance, 47, 116
  Financial statements, 187; budget for 1962, 188
  Gifts accepted: check from Dr. Enlows, 60; photographs of Medical Society's presidents from Mr. Wiprud, 241
  "Health-U. S. A." luncheon: See "Health-U. S. A."
  Interstate Scientific Assembly, second, 537–52; committee chairmen, 300; report on, 707
  Legal counsel, 189
  MEDICAL ANNALS, appointment of consulting editor, 121; editor and his staff (Observer), 167; White Awards for surgical papers, 225, 494
  Medical Emergency and Disaster Service, exercise and participants, 372
  Medical Self-help training program, approved, 60
  Membership: electees, 125, 166, 243, 293, 371, 424, 496, 559, 662, 714; honorary, 53; Life (Cafritz, Hottel, Jenkins, Strine, Trible, Peabody, Perry, Schreiber, Moffett) 125
  Meritorious Public Service Award received from D. C. Commissioners (photo), 180
  Midwinter Seminar, 59, 601
  Nichols Award for laymen, recipient for 1961 (photo), 43; nominees requested for 1962, 182
  Officers, 189; electees, 53; retirement of secretary-treasurer, 163, successor, 163, 415, 429; resignation of assistant secretary, 372, successor, 558
  President, biography, 36; photo, 35
  Representatives: List of, 193
    American Medical Association: Conference of Mental Health Representatives of State Medical Associations, 182; National Congress on Mental Illness and Health, 494; National Legislative Conference, 121
    District of Columbia: Citizens' Traffic Board, 376; committee on juvenile delinquency and prevention, 558
    "Health-U. S. A." luncheon: awards committee, 121; executive committee, 56
    Health and Welfare Council: Delegates' Assembly, 372; Health Conference, 300, 372
    National Conference of Joint Council to Improve Health Care of Aged, 60
    National Foundation: Health Scholarship Committee for D. C., 300
    Regional Conference of Social Security Health Care of Aged, 60

- Sections:
  - Meeting schedule, 616
  - Officers, 194, 616; eligibility for office, 429
  - General Practice, officers, 711
  - General Surgery, approved by executive board, 301
  - Internal Medicine and Allied Subspecialties, officers, 430
  - Neurology, Neurosurgery and Psychiatry, officers, 242
  - Pathology and Laboratory Medicine, officers, 123
  - Radiology, officers, 429
  - Thoracic and Cardiovascular Surgery, approved by executive board, 301

Medical Societies and Allied Organizations, national, international and regional:

- Academy of Psychoanalysis in United States, international forum, 120
- American Academy of General Practice, officers, 373
- American College of Chest Physicians: See editorial (Peabody), 702
- American College of Obstetricians and Gynecologists, Armed Forces Chapter organized, 559; new fellows, 496
- American College of Radiology, new fellow, 184
- American College of Surgeons, new fellows, 714; sectional meeting, 181
- American Diabetes Association, check list for treatment, 40; postgraduate course, 710
- American Medical Association:
  - AMA-USP Nomenclature Committee: "United States Adopted Names" to apply to nonproprietary names, 301
  - Annual meeting, 299, 492
  - Appointments: Dr. Hein, director, Department of Health Education, 123; Mr. Holman, secretary, Council on Medical Service, 431; Dr. Hussey, director, Scientific Activities, 701
  - Committee on Nursing, objectives and program of; a reprint (Kirchner et al), 650
  - Medicolegal Symposium, 710
  - Military service of physicians (Blasingame), 604
  - President-elect Annis (photo), 492; see editorial (Cooley), 535
  - Publications available: "Current Medical Terminology 1963," 559; "Guides to the Evaluation of Permanent Impairment," 40; Medical Health Film Library catalog for 1962, 560; "Reviews of Medical Motion Pictures for 1961," 242
  - Retirement: Dr. Bauer, director, Department of Health Education, 123
  - See In and Out of Focus (Observer), 46; narcotic addiction in U. S., 416
- American Medical Association Education and Research Foundation (formerly American Medical Education Foundation and American Medical Research Foundation) incorporated, 122; grants to Washington medical schools (photo), 240
- American Medical Women's Association, Chicago meeting, 299
- American Medical Writers' Association, annual meeting, 556, 711; first executive secretary, 431
- American Society of Medical Technologists, annual meeting, 300
- American Urological Association, seminar, 607
- Asiatic Congress of Obstetrics and Gynecology, second, (Dodek) 653
- Association of Military and Flight Surgeons of Central America, organized, 374
- Association of Military Surgeons of United States, officers, 60
- Association of Reserve Officers of the U. S. Public Health Service, officers, 60
- Educational Council for Foreign Medical Graduates: Dr. Hunt appointed associate executive director, 242; see editorial (Foley), 288
- Group Health Association of America, Inc., annual institute, 299
- International Cancer Congress, report on Moscow meeting, (White) 605; see editorial (White), 593
- International Congress of Dermatology, Washington meeting, 493; report on, (Kanof) 651
- International Doctors in Alcoholics Anomymous, meeting, 372
- Joint Blood Council, directory of blood transfusion facilities and services, 494; dissolved, 712
- Medico, Inc., affiliated organizations, 61; commended by D. C. Medical Society, 57; merged with Care, 183
- National Society for Prevention of Blindness: Miss Albrecht appointed field representative, 609
- Pharmaceutical Manufacturers Association, appointees to Commission on Drug Safety, 558
- State Medical Journal Conference, addresses: (VanDellen) 117, (Smith) 235

Medical Societies and Allied Organizations, local and vicinity:

- Officers and meeting schedule, 615–6
- Academy of General Practice, D. C. Chapter, co-sponsor with Maryland Chapter of scientific assembly, 241
- Allergy, officers, 123
- American Association of Medical Assistants, D. C. Chapter, organized, 371; approved by executive board of D. C. Medical Society, 429; cancer symposium, 607; officers, 711; see editorial, 596
- American Cancer Society, D. C. Division, anniversay dinner, 61; annual meeting, 494; Cancer Answers service, 712; officers, 494; president (photo), 484; see editorials (Ault) 286, (Herbst) 226; Cancer Page
- American Cancer, Montgomery County (Md.), conference, 181
- American College of Obstetricians and Gynecologists, District IV, officers, 496
- Arthritis and Rheumatism Foundation, Virginia Chapter, seminar, 59, 120
- Dental, postgraduate clinic, 119
- Dermatological, officers, 430
- Diabetes Association of D. C., symposium, 557, 657
- Fairfax County (Va.), officers, 123
- George Washington University Medical Alumni, annual dinner, 423; officers, 424; see Roll call of medical class of 1912 (Borden), 427

- Georgetown Clinical, officers, 373
- Graduate Nurses' Association, officers, 61
- International Medical Club of Washington, officers, 302
- Maryland Academy of General Practice, scientific assembly, 557
- Medical and Chirurgical Faculty of the State of Maryland, annual meeting, 120
- Medical Council of Washington Metropolitan Area, officers, 183
- Metropolitan Washington Blood Service Plan, approved by executive board, D. C. Medical Society, 657
- Montgomery County Cancer Society, symposium, 59
- Northern Virginia Academy of Ophthalmology, organized, 430
- Saint George, meetings, 59, 119
- Saint Luke Physicians' Guild, organized, 123
- Southern Medical Association, D. C. Auxiliary to: See Doctors' Day
- Thoracic, officers, 374
- Washington Academy of Surgery, essay contest winners, 430; officers, 430
- Washington Area Council on Alcoholism, conference, 299
- Washington Gynecological, meeting, 119
- Washington Heart Association, officers, 495; symposium co-sponsored with Northern Virginia Heart Association, 120, 181, (lecturers-photo) 432; symposium co-sponsored with Maryland Heart Association, 493, 556
- Washington Psychiatric, officers, 302
- Washington Society for the History of Medicine, program, 657

Medical Care Identification Cards, extension of, (Fenton) 705

Mediphone, Inc., for drug information, 122

Meredith, R. H., appointed deputy director, Civil Service Commission, 661

Metcalf, G. W.: Woodley House—a pioneering mental health project, 172

Military Service of physicians, (Blasingame) 604

Mitchell, E. H., Jr., stamp collector (Observer), 113

Montgomery, W. P., appointed to D. C. Board of Police and Fire Surgeons, 62

Moss, J. M., appointed to editorial board, *Virginia Medical Monthly*, 432; co-chairman, Second Interstate Scientific Assembly, 300; president, Virginia Society of Internal Medicine, 243

N

Newhouse, B., honored by University of Maryland, 432

Nicklas, E. W.: See report of chairman of board of credentials, 600

Niess, O. K., named "honorary president" of Association of Military and Flight Surgeons of Central America, 374

Nordlinger, G., named clinical professor emeritus of George Washington University, 423; receives "captain's chair" from University (photo), 423

O

Obituaries:
- Brown, G. T., 125
- Cardozo, W. W., (Scott) 612
- Casady, J. W., 306
- Clark, G. C., 185
- Coale, E. S. (photo), 716
- Crawford, H. J., 245
- Daly, J. M., 614
- Dub, L. M., 126
- Eldridge, W. W., Jr., 611
- Fishback, F. C., 64
- Giltner, H. A., 244
- Guynn, R. F., 611
- Hall, R. W., 186; memorial to St. Elizabeths Hospital, 562
- Halley, C. R. L., 563
- Heffner, W. N., 434
- Jarman, B. L., 563
- Kaibni, F. I., 126
- Karpman, B., 434
- Leslie, F. G., 614
- Lyons, J. H., 247; photo, 246; The Good Physician (Wiprud), 247; memorial fund, 302
- Martinez, F. A., 613
- Naiman, B. L., 377
- Parker, W. A., 305
- Reed, J. A. (photo), 433
- Reeves, G. W., 613
- Scheuch, C. D., 245
- White, D., 432

Oppenheimer, E., chief, D. C. Bureau of Maternal and Child Health, retires (photo), 375; cited by D. C. Department of Health, 375, by District Commissioners, 714

Overholser, W., honored by Boston University, 375; portrait of, presented to George Washington University, 243; retires as superintendent of St. Elizabeths Hospital (photo), 660

P

Palmer, R. E., elected president-elect, Medical Society of Virginia, 714

Parrott, R. H., appointed director, Children's Hospital, 495; photo, 496

Peery, T. M., elected alternate delegate to AMA, 53

Pellegrini, F. S., elected first vice president, D. C. Medical Society, 53

Pension Plans for physicians under the new Keogh Law, (Roesser) 706

Peptic Ulcer as status symbol, (Gibb) 481

Pierpont, H. C., elected president, Washington Heart Association (photo), 495

Porterfield, J. D., appointed state coördinator of health and medical affairs, Univerity of California, 560

President's Page (Dryden):
- An Impressive Gallery, 34
- Recruiting Committee Members, 102
- Beyond the Call of Duty, 162

What's Happening on M Street, 224
Who Speaks for Medicine? 281
In Focus on "Ted," 351
Liberty or Security—Which Will It Be? 414
Democracy at Work, 476
The Truth, the Whole Truth, and Nothing but the Truth, 532
The Coming Assembly, 592
Politics and Medicine, 646
To the Membership, 700

Public Health: National Poison Prevention Week, 124

R

Ramsey, H. P., emcee at Wiprud testimonial dinner (photo), 362, commended by executive board, 429; nominee for Robins Award, 658, recipient (photo), 708; resigns from Commissioners' Hospital Advisory Council, 125

Rayford, L. L., Jr., appointed chief deputy coroner for D. C., 660

Rees, T. R., appointed to Board of Veterans Appeals, 184

Richtmeyer, D. C., elected to executive board, D. C. Medical Society, 53

Roesser, E. F.: Pension plans for physicians under the new Keogh Law, 706

Roth, G. B., receives "captain's chair" from George Washington University, 423

S

Sanderson, F. R., honored by Georgetown Alumni Club, 303

Saunders, W. B., Company, medical writing award, 659

Scalettar, R., cited by Walter Reed General Hospital, 562

Scheele, L. A., appointed to Commission on Drug Safety, 559

Schreiner, G. E., appointed to National Research Council, 431; president, American Federation for Clinical Research, 431

Shafer, J. C., named "Medical Woman of the Year" by Branch I, AMWA, 62

Shields, C. D., appointed chairman, advisory council to Physical Medicine and Rehabilitation Service, VA, 562

Shwartz, S., appointed to obstetrical board, D. C. Medical Society, 558

Smith, A.: The Case of the slippery statistic, 235

Smith, J. E., appointed regional medical director, United Air Lines, 376

Stubbs, D., president, D. C. Medical Society, confers awards (photos), 42, 43, 46; receives gavel from chairman of executive board, 53

T

Terry, L. L., proposed for honorary membership in D. C. Medical Society, 57, elected, 53

Thomas, L. J., elected president-elect of Phi Lambda Kappa, 184

Travel News: Caribbean cruise and seminar, 610; world tour, 304, 610

Travel Notes: European tour 1962, 63

Travell, J., named "Medical Woman of the Year" by New York State Branch, AMWA, 62; proposed for honorary membership in D. C. Medical Society, 57, elected, 53

U

U. S. Department of Defense:
Appointments to office: Captain Brown, commanding officer, National Naval Medical Center, 242; Captain Canada, deputy commanding officer, National Naval Medical Center, 242
Kenner Army Hospital, dedicated, 374
Medical Care: extension of identification cards, (Fenton) 705

U. S. Department of Health, Education, and Welfare:
Appointments to office (PHS); Dr. Anderson, chief, bureau of state services, 560; Dr. Christensen, deputy chief, bureau of state services, 560; Dr. Goddard, chief, Communicable Disease Center, 608; Dr. Kety, chief, laboratory of clinical science, National Institute of Mental Health, 560; Dr. Powell, chief, Division of General Medical Sciences, 373; Dr. Price, deputy surgeon general, 560; Dr. Sessoms, deputy director, NIH, 560
National Institutes of Health: Division of Research Facilities and Resources established, 373; special issue of MEDICAL ANNALS (December), 663
National Library of Medicine, building dedicated, 122, opened, 375; guided tours, 430
Public Health Service:
  Advisory Committee on Smoking and Health, appointees to, 711
  Awards: Dr. Felix, Rockefeller Award, 61; Dr. Hunt, Meritorious Service Medal, 659; Dr. Shannon, Public Welfare Medal, National Academy of Sciences, 374; Dr. Smadel, Lasker Award, 713; Dr. Watt, Award of Merit, American Heart Association, 124, Bronfman Award, 60
  Clinical Center: "Current Clinical Studies and Patient Referral Procedures," revised copies available, 60, 430; studies for patient referral: chronic myelogenous leukemia, 107, 555; glycogen storage diseases, 424, 605; juvenile rheumatoid arthritis, 303; Reiter's syndrome, 555
  Publications available: "Classification of Headache," 430; "Immunization Information for International Travel," 658
  Tuberculosis activities moved to Communicable Disease Center, Atlanta, 301
  Resignations/retirements: Dr. Chan, director of investigations, 608; Dr. Daft, director, National Institute of Arthritis and Metabolic Diseases, 374; Dr. Hunt, chief, Division of General Medical Sciences, NIH, 242, honored by International Medical Club, 302; Dr. Kurlander, assistant surgeon general, 659

U. S. Federal Aviation Agency: Dr. Haynes appointed chief of psychiatric services, 658

U. S. Treasury Department: Mr. Giordano appointed commissioner, Bureau of Narcotics, succeeding Mr. Anslinger, 560

U. S. Veterans Administration:
Appointment: Dr. Blasko, Director of Psychiatry, Neurology and Psychology Service, 301
Awards: Dr. Hueper, United Nations prize, WHO, 431; Senator Humphrey, Knudson Award, 659; Dr. Pipberger, Middleton Award, 124

V

VanDellen, T. R.: The Functions of a state medical journal, 117

W

Walsh, W. B., awarded honorary degree by Georgetown University, 303; honored by Sertoma Club, 376

Watson, J. C., elected president-elect, Northern Virginia Society of Internal Medicine, 243

Watts, J. W.: See reports of chairman of executive board, D. C. Medical Society, 54, 597

Wells, R. L., appointed to Council of Occupational Health, AMA, 303; elected president, American Academy of Occupational Medicine, 303

Whelton, R. L., appointed coroner for D. C., 660; photo, 661

White, C. S., contributes awards for surgical papers, 225, 494; named "Doctor of the Year" by D. C. Auxiliary to Southern Medical Association (photo), 298

Whitley, R. D., renominated to board of trustees, Group Hospitalization, 710

Wilber, I., elected Lt. Governor, District III, Zonta International, 714

Wilson, F. E., reëlected executive vice president, Joint Blood Council, 562

Wiprud, T. (Observer): Retirement as secretary and executive director of D. C. Medical Society announced, 163; congratulatory messages from President Kennedy, 357, from General Eisenhower, 363; honored by International Medical Club, 302; memento from news services (photo), 361; an Ode to "Ted" (Kadan), 365; testimonial dinner, 233, 362, (photos) 362, 363; appointed special assistant to executive vice president, Medical Service of D. C., 609; editor, *Medical Service Reporter*, 703; see editorial (Yater), 282, photo, 283; In and Out of Focus; In and Out of Focus to the Observer, 355; President's Page, 351; report of executive board, 54

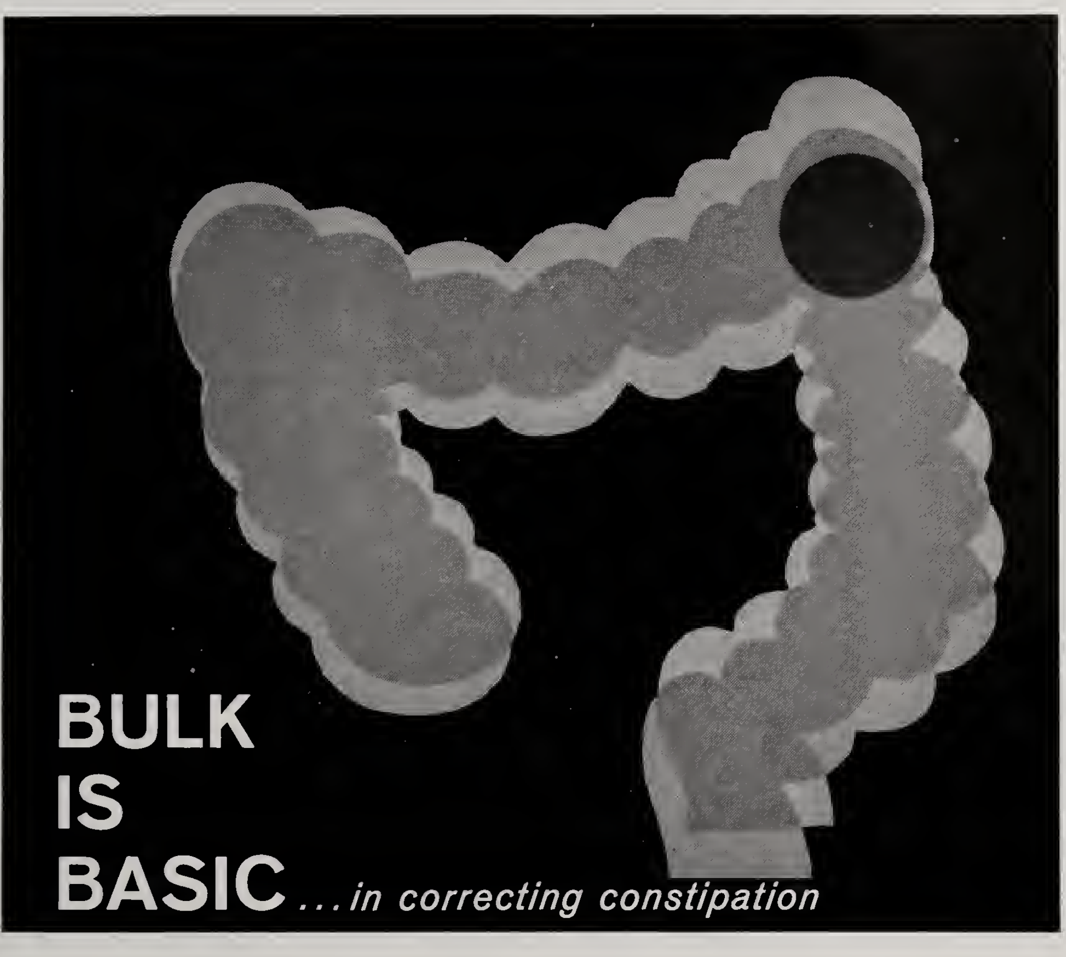
Woman's Auxiliary to the Medical Society of the District of Columbia: Committee chairmen, 596; notes, 63, 714; officers, 596; president (photo), 714

Y

Yater, W. M., reëlected secretary-general, American College of Physicians, 375

Z

Zupan, L. A., appointed administrator, Washington Clinic, 354; cited by D. C. Medical Society (photo), 354; see editorial (Wiprud), 354



METAMUCIL®

BRAND OF PSYLLIUM HYDROPHILIC MUCILLOID

STRENGTHENS THE COLONIC REFLEX

"The natural stimulus to peristalsis[1]... is the distension of the intestinal wall...."

The effectiveness of Metamucil in correcting constipation is a direct result of its physiologic action.

The stimulus which initiates the defecatory reflex is the fecal mass in the lower sigmoid colon and rectum. Metamucil provides that mass as a bland, nonirritating, easily compressed bulk, similar in consistency to the normal protective mucus of the colon. Taken regularly, Metamucil tends to correct the insensitive reflex of a bowel abused by laxatives and to restore the natural responsiveness to the urge to stool.

Metamucil is available as Metamucil powder in 4, 8 and 16-oz. containers and as lemon-flavored Instant Mix Metamucil in cartons of 16 and 30 single-dose packets.

1. Best, C. H., and Taylor, N. B.: The Physiological Basis of Medical Practice, ed. 6, Baltimore, The Williams & Wilkins Company, 1955, p. 578.

G. D. SEARLE & CO.
CHICAGO 80, ILLINOIS

Research in the Service of Medicine

Looking for
injectable
potency...

FILMTAB®
SURBEX-T® provides
therapeutic B-complex
with 500 mg. of C

...in ORAL form?

100 Tablets
No. 6842
Filmtab®
SURBEX-T®
Abbott's High-Potency Vitamin B Complex with Vitamin C.
ABBOTT

Patients receive replenishment in the easiest possible manner when the water soluble vitamins are depleted, or demands are increased.

Each Filmtab® Surbex-T represents:

Thiamine Mononitrate (B_1)	15 mg.
Riboflavin (B_2)	10 mg.
Nicotinamide	100 mg.
Pyridoxine Hydrochloride	5 mg.
Cobalamin (Vitamin B_{12})	4 mcg.
Calcium Pantothenate (as calcium pantothenate racemic)	20 mg.
Ascorbic Acid (C) (as sodium ascorbate)	500 mg.
Desiccated Liver, N.F.	75 mg.
Liver Fraction 2, N.F.	75 mg.

...and when needs are more moderate, SUR-BEX® with C, Abbott's improved B-complex formula with 250 mg. of C.

ABBOTT

210270

Filmtab—Film-sealed tablets. Abbott. U.S. Pat. No. 2,881,085

scratching helps...

but Calmitol stops itching fast!

For every kind of pruritus—for adults or children—safe, fast-acting CALMITOL Ointment soothes itching on contact, helps prevent secondary trauma caused by scratching. And low-cost, conservative CALMITOL is nonsensitizing. CALMITOL Ointment is available at all pharmacies in 1½ oz. tubes and 1 lb. jars. For more stubborn pruritus, CALMITOL Liquid in bottles of two fluidounces.

THOS. LEEMING & CO., INC., New York 17

CALMITOL®

for anything that itches

Relieves Anxiety and Anxious Depression

The outstanding effectiveness and record of safety with which Miltown relieves anxiety and anxious depression—the type of depression in which either tension or nervousness or insomnia is a prominent symptom – has been clinically authenticated time and again during the past seven years. This, undoubtedly, is one reason why physicians still prescribe meprobamate more often than any other tranquilizer in the world.

Miltown®

meprobamate (Wallace)

Usual dosage: One or two 400 mg. tablets t.i.d.
Supplied: 400 mg. scored tablets, 200 mg. sugar-coated tablets; bottles of 50. Also as MEPROTABS® – 400 mg. *unmarked*, coated tablets; and in *sustained-release* capsules as MEPROSPAN®-400 and MEPROSPAN®-200 (containing respectively 400 mg. and 200 mg. meprobamate).

WALLACE LABORATORIES / *Cranbury, N. J.*

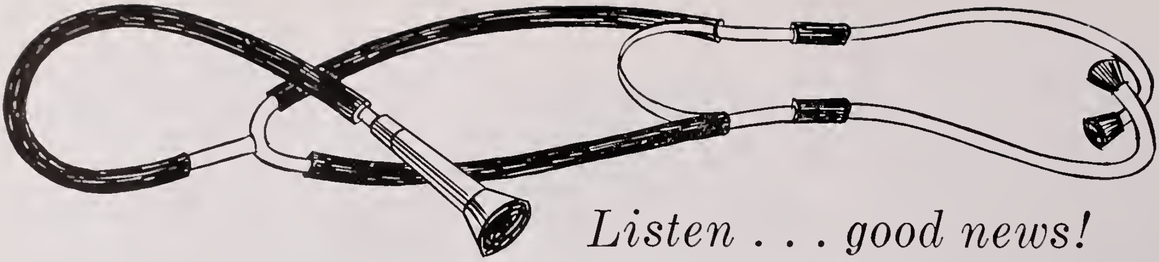
Clinically proven in over 750 published studies

1 Acts dependably – without causing ataxia or altering sexual function

2 Does not produce Parkinson-like symptoms or liver damage

3 Does not muddle the mind or impair physical activity

CM-7972



Listen . . . good news!

GET BROADER PROTECTION AGAINST CLAIMS RESULTING FROM PRACTICE OF MEDICINE

with St. Paul's Professional Liability Insurance

1. **Broader Protection.** A *St. Paul* policy assures you of complete "professional services" protection.

2. **Absence of Exclusions.** All professional liability policies are not the same. The *St. Paul* policy has only one exclusion—Workman's Compensation as it applies to your own employees.

3. **Experienced, Sound Company.** The *St. Paul* has established an enviable record of competence extending over more than 100 years.

4. **Effective Defense and Prevention.** Close liaison with doctors and medical societies helps the Company to pinpoint areas of risk and to develop educational material which assists doctors in avoiding claims.

For complete information on "broader protection" Professional Liability Insurance see your nearest *St. Paul* agent.

THE ST. PAUL
INSURANCE COMPANIES

Serving you around the world... around the clock
St. Paul Fire & Marine Insurance Company
St. Paul Mercury Insurance Company
Western Life Insurance Company

Approved Carrier of The Medical Society of the District of Columbia

The following Agents are ready to serve you and are as close as your telephone:

M. Abrams & Co., 514 Washington Bldg.
Washington 5, D.C. NAtional 8-6578

Anderson & Company, Inc., 1832 M St., N.W.,
Washington 6, D.C. EM 3-9393

A. H. Baker & Company, 930 Woodward Bldg.,
Washington 5, D.C. EXecutive 3-2460

District Agency Company, 800 Investment Bldg.
1511 K Street, N.W., Washington 5, D.C.
NAtional 8-8756

Eig & McKeever, Agents, 8641 Colesville Road,
Silver Spring, Maryland
Telephone JUniper 8-8200

Feldmann Insurance Agency, 267 Carroll St., N.W.,
Washington 12, D.C. TUckerman 2-4079

Greater Washington Agency, Inc., 419 Union
Trust Building, Washington 5, D.C.
STerling 3-8383

Harrell Brothers & Campbell, Suite 101,
1757 K St., N.W., Washington 6, D.C.
STerling 3-3555

Insurance Services Co., Inc.
3408 Wisconsin Ave., N.W.
Washington 16, D.C.
WOodley 6-8180

Lampson & Ashley Ins. Agency
7044 Carroll Ave., Takoma Park, Md.
JUniper 5-7166

LeRoy Mark, Inc., 408 Colorado Bldg.,
Washington 5, D.C. NAtional 8-0601

Martens & Moore, 4801 Wisconsin Ave., N.W.,
Washington 16, D.C. EMerson 3-5300

McDermott Insurance, 1130 17th St., N.W.,
Washington 6, D.C. DIstrict 7-1114

Harry Merkin Company, 815 15th Street, N.W.,
Washington 5, D.C. STerling 3-4977

H. Gabriel Murphy & Co., Inc.,
1001 Connecticut Ave., N.W., Washington 6, D.C.
DIstrict 7-9300

Howard W. Phillips & Co., 1820 N St., N.W.,
Washington 6, D.C. FEderal 8-2121

Russell, Marsh & Kennedy, Inc., Marsh Building,
1832 M St., N.W., Washington 6, D.C.
FEderal 8-7600

Victor O. Schinnerer & Co., Inc.
1131 Investment Bldg., Washington 5, D.C.
REpublic 7-1929

Walker & Dunlop Agency, Inc.
905 16th Street, N.W.
Washington 6, D.C.
STerling 3-5050

Watson & Watson, Sheraton Bldg.,
711 14th St., N.W., Washington 5, D.C.
DIstrict 7-7166

Young & Simon, Inc., Suite 340, Woodward Bldg.,
Washington 5, D.C.
DIstrict 7-5180

WASHINGTON, D.C. OFFICE
910 17th St., N.W. Washington 6, D.C.
COMPLETE CLAIMS SERVICE—Tel. 296-4474

a pair of cardiac patients:

both are free of pain—but only one is on

DILAUDID®

(Dihydromorphinone HCl)

swift, sure analgesia normally unmarred by nausea and vomiting

DILAUDID provides unexcelled analgesia in acute cardiovascular conditions. Onset of relief from pain is almost immediate. The high therapeutic ratio of DILAUDID is commonly reflected by lack of nausea and vomiting—and marked freedom from other side-effects such as dizziness and somnolence.

● **by mouth** ● **by needle** ● **by rectum**

2 mg., 3 mg., and 4 mg.

May be habit forming—usual precautions should be observed as with other opiate analgesics.

KNOLL PHARMACEUTICAL COMPANY · ORANGE, NEW JERSEY

Carry it . . .

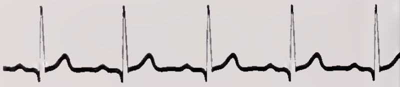
Even a petite nurse can easily pick up and carry a Sanborn Visette® electrocardiograph wherever it's needed — in the office, on house calls, in the clinic or laboratory. Not much bigger than a doctor's bag, the Visette weighs only 18 pounds — with all accessories.

And as portable as it is, a Visette nevertheless equals any "office standard" ECG in recording quality and accuracy. Every record is sharp, clean, permanent and — as you expect from Sanborn Company — diagnostically accurate. Compactness and ruggedness for travel are achieved by the practical means of modern miniaturized circuitry, not by sacrificing accuracy.

If you prefer the greater versatility of two chart speeds, three recording sensitivities and provision for recording and monitoring other phenomena, the Model 100 Viso-Cardiette is a logical choice. And when these capabilities are needed in a mobile instrument, the mobile cabinet version (Model 100M) is designed to be easily rolled to bedsides in hospital or clinic.

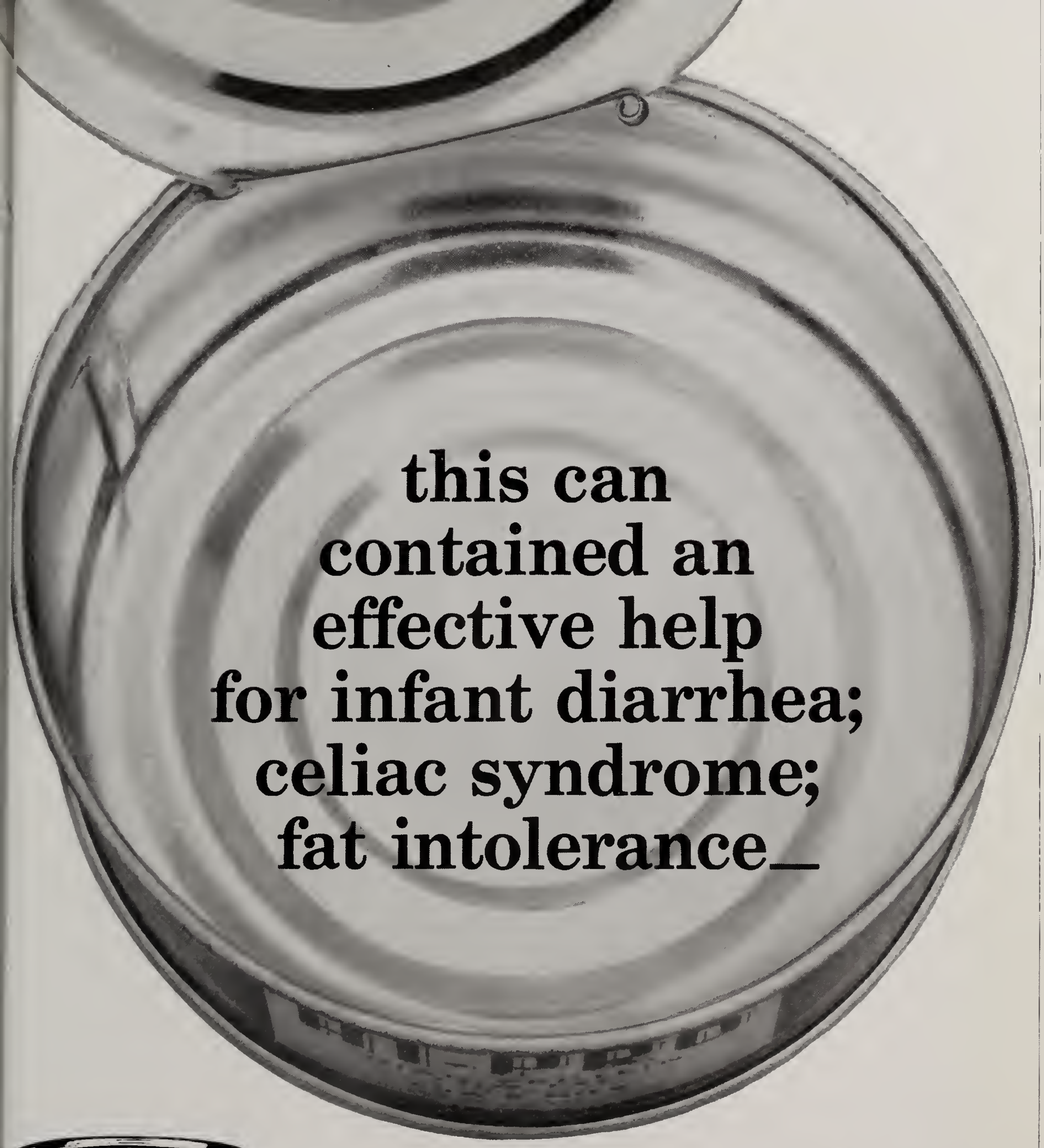
Regardless of which of these three instruments you choose, each has a valuable and unique feature: Sanborn service. It lasts long after the sale . . . from people who know your ECG and value your satisfaction.

wherever you need "on-the-spot" cardiography

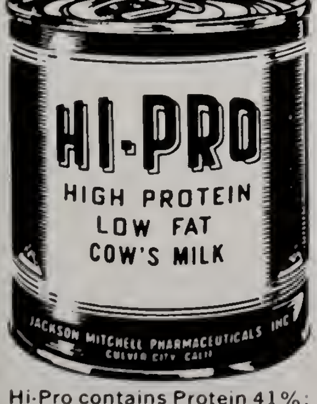


SANBORN COMPANY
MEDICAL DIVISION *Waltham 54, Mass.*

BETHESDA *Branch Office* 8118 Woodmont Ave.
Oliver 6-5170 and 6-5171
BALTIMORE *Resident Representative* 12 East 24th St., 889-1117,1118



this can
contained an
effective help
for infant diarrhea;
celiac syndrome;
fat intolerance—



HI-PRO
HIGH PROTEIN
LOW FAT
COW'S MILK
JACKSON MITCHELL PHARMACEUTICALS INC.
CULVER CITY CALIF.

Hi-Pro contains Protein 41%; Fat 14%; Lactose 35%. Available in 1-lb. and 2½-lb. cans.

AND IT'S FREE

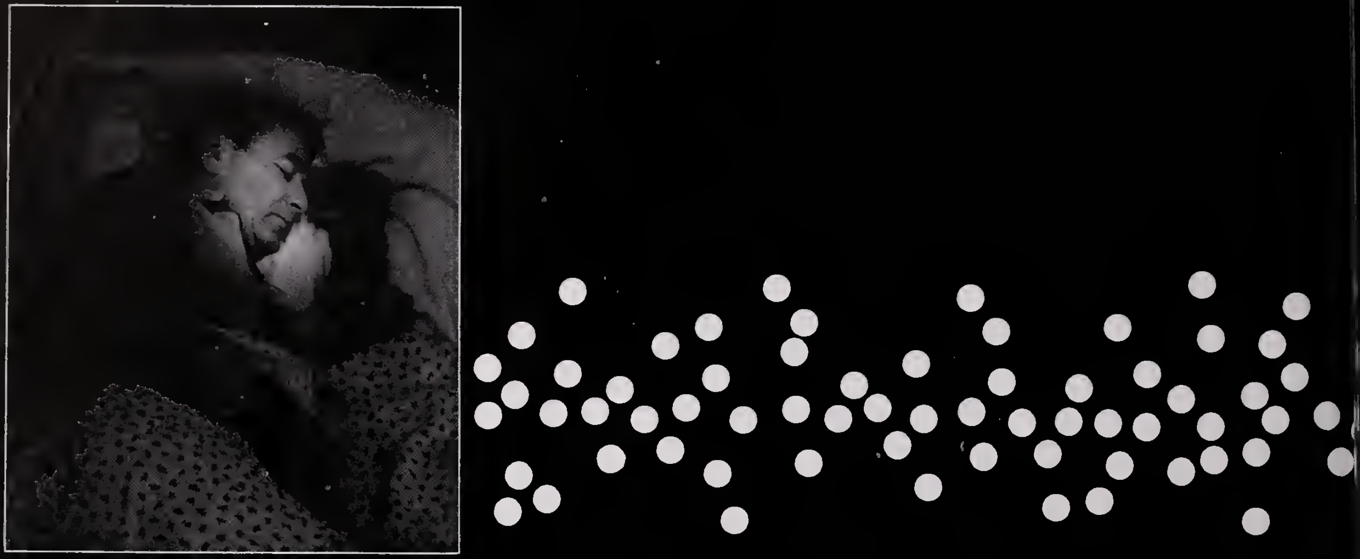
SEND ME MY FREE SAMPLE OF HI-PRO, 2 OZ. SIZE

Mail to: Jackson-Mitchell Pharmaceuticals, Inc.
10401 Virginia Ave., Culver City, California
Babying Americans since 1934

Name ____________________

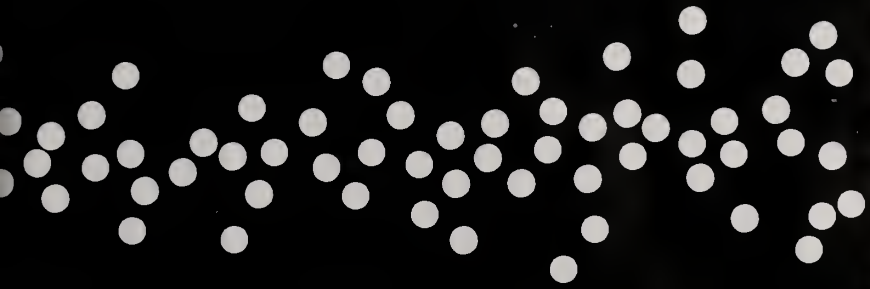
Address ____________________

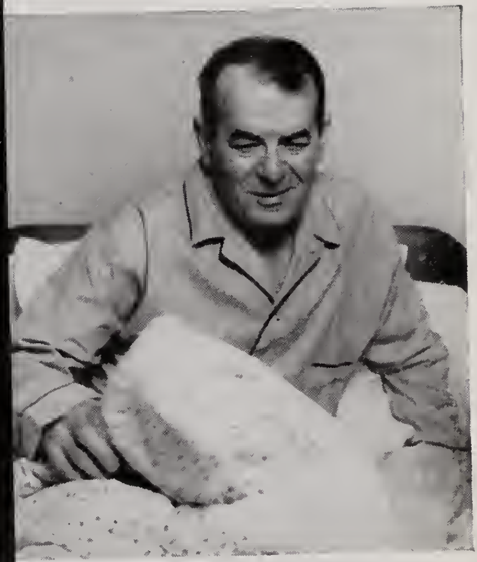
City ____________ Zone ______ State ________



Thanks to 135 tiny "doses" throughout the

*Trademark, Reg. U.S. Pat.Off. Copyright 1962, The Upjohn Company





night, the arthritic wakes up comfortable

Morning stiffness may be reduced or even eliminated as a result of therapy with the only steroid in long-acting form. And the slow, steady release of steroid makes it possible in some cases to reduce the frequency of administration and/or the total daily steroid dosage.

Medrol* Medules*

Each hard-filled capsule contains Medrol (methylprednisolone) 4 mg. Also available in 2 mg. soft elastic capsules.

Supplied in bottles of 30 and 100.

Reminder advertisement.
Please see package insert for
detailed product information.

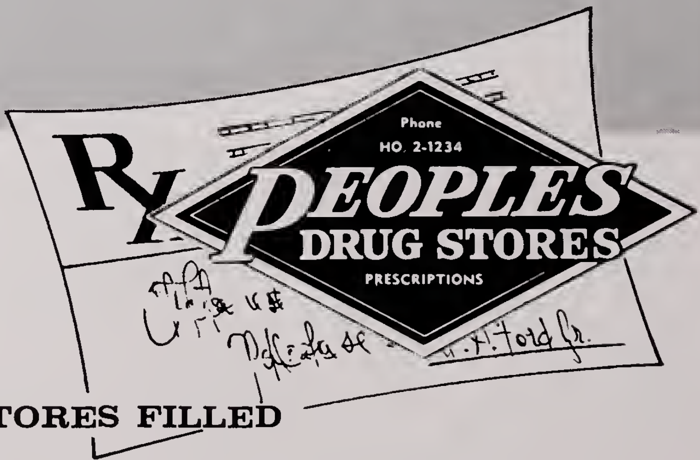
Upjohn

The Upjohn Company, Kalamazoo, Michigan

every 7 seconds

60
5
10
15
20
25
30
35

Peoples Drug Stores Filled A Prescription In 1961!


Rx
Phone
HO. 2-1234
PEOPLES
DRUG STORES
PRESCRIPTIONS

PEOPLES DRUG STORES FILLED

4,424,474 PRESCRIPTIONS IN 1961

Put your low-back patient back on the payroll

Soma relieves stiffness –stops pain, too

YOUR CONCERN: Rapid relief from pain for your patient. Get him back to his normal activity, fast!

HOW SOMA HELPS: Soma provides direct pain relief while it relaxes muscle spasm.

YOUR RESULTS: With pain relieved, stiffness gone, your patient is soon restored to full activity—often in days instead of weeks.

> Kestler reports in controlled study: *Average time for restoring patients to full activity: with Soma, 11.5 days; without Soma, 41 days.* (*J.A.M.A. Vol. 172, No. 18, April 30, 1960.*)

Soma is notably safe. Side effects are rare. Drowsiness may occur, but usually only in higher dosages. Soma is available in 350 mg. tablets. USUAL DOSAGE: 1 TABLET Q.I.D.

The muscle relaxant with an independent pain-relieving action

SOMA®

(carisoprodol, Wallace)

Wallace Laboratories, Cranbury, New Jersey

Logical support for the atherosclerosis diet

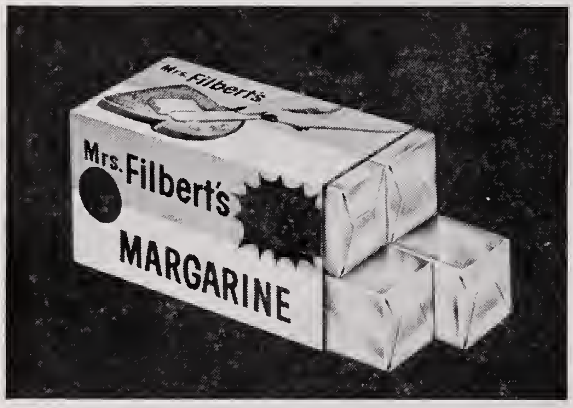
A recent report* in the *JAMA* on atherosclerosis states, "...it appears logical to attempt to reduce high concentrations of cholesterol and other serum lipids as an experimental therapeutic procedure."

Since this report recognizes table spreads as an important source of dietary fat, it is in your professional interest to know about the fatty-acid composition of the margarines from Mrs. Filbert's.

Each of Mrs. Filbert's Margarines is over 80% unsaturated and offers unique properties useful in the control of serum lipids by dietary means.

Moreover, when you recommend any one of Mrs. Filbert's Margarines, your patient is assured of unmatched taste and flavor satisfaction—an important consideration in promoting adherence to any therapeutic regimen.

*AMA Council on Foods and Nutrition: The Regulation of Dietary Fat, *JAMA* 181: 411-423 (August 4, 1962).



Mrs. Filbert's Margarine is a popular, conventional-type margarine with no premium price. It is made from the finest domestic vegetable oils, which are partially hydrogenated for texture, but remain over 80% unsaturated. It has a ratio of polyunsaturates to saturates in excess of 1 to 1. Of the total fatty-acid content, 7% is cis-cis linoleic acid.

Mrs. Filbert's
100% CORN OIL
CORN OIL MARGARINE

Mrs. Filbert's Corn Oil Margarine is made from 100% corn oil, over 50% of which retains its *liquid* characteristics. Because of its high linoleic content, its ratio of polyunsaturates to saturates exceeds 1.5 to 1 . . . and equals the highest level available today in *any* corn oil margarine. Of the total fatty-acid content, 28% is cis-cis linoleic acid. Thus, it can be most useful in a program for reducing serum cholesterol levels.

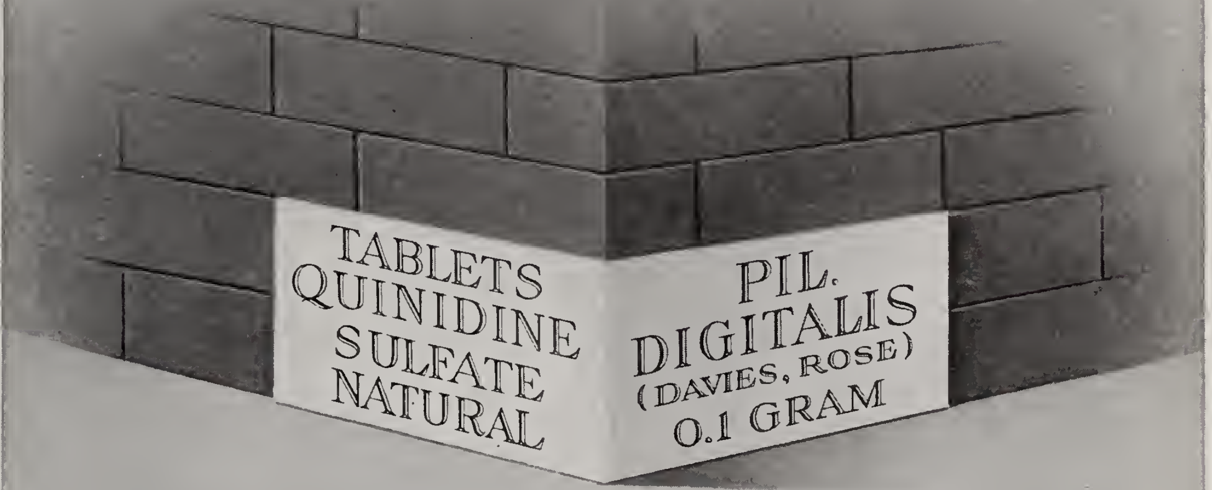
2 EXTRA STICKS
Mrs. Filbert's
whipped margarine

Mrs. Filbert's Whipped Margarine contains the same number of calories per pound as ordinary margarine, but contains 30% *fewer calories per pat* because it is whipped. When spread normally, it provides satisfaction with a reduction in fat calories. And its ratio of polyunsaturates to saturates exceeds 1 to 1. Of the total fatty-acid content, 7% is cis-cis linoleic acid.

If you would like information about Mrs. Filbert's family of margarines—including detailed listings of their component characteristics—please write us.

J. H. FILBERT, Inc.
Baltimore 29, Maryland

A CORNERSTONE OF
CARDIAC THERAPY



The Dictionary defines a cornerstone as something of fundamental importance, just as Pil. Digitalis, (Davies, Rose) and Tablets Quinidine Sulfate Natural (Davies, Rose) are of fundamental importance in treating your cardiac patients. These preparations represent 60 years of experience and dependability in the manufacture of pharmaceuticals.

Pil. Digitalis (Davies, Rose), 0.1 Gram (approx. 1½ grains) which comprise the entire properties of the leaf, provide a dependable and effective means of digitalizing the cardiac patient, and of maintaining the necessary saturation.

Tablets Quinidine Sulfate Natural, 0.2 Gram (approx. 3 grains) are alkaloidally assayed and standardized, insuring uniformity and therapeutic dependability. Each tablet is scored for the convenient administration of half dosages.

Davies, Rose & Company, Limited - Boston 18, Mass.

DQ-2

SPECIAL COUGH FORMULA for Children

Pediacof®

SOOTHING DECONGESTANT AND EXPECTORANT

Each teaspoon (5 ml.) contains:

Codeine phosphate	5.0	mg.
Neo-Synephrine® hydrochloride (brand of phenylephrine hydrochloride)	2.5	mg.
Chlorpheniramine maleate	0.75	mg.
Potassium iodide	75.0	mg.

Bright red, pleasant tasting, raspberry flavored syrup

Dosage:

Children from 6 months to 1 year, 1/4 teaspoon; 1 to 3 years, 1/2 to 1 teaspoon; 3 to 6 years, 1 to 2 teaspoons; 6 to 12 years, 2 teaspoons. Every four to six hours as needed.

How Supplied:
Bottles of 16 fl. oz.

Available on prescription only.

Exempt Narcotic

Winthrop
LABORATORIES
New York 18, N. Y.

Keep the rheumatic man in motion!

DELENAR loosens the rheumatic grip on muscles and joints, starts them functioning again—first by a direct relaxant action on skeletal muscle, again by its specific analgesic effects. And, while immediate symptomatic relief restores motion, underlying inflammation is reduced with the low-dosage corticosteroid.

Now you can restore comfortable motion safely, surely with DELENAR in rheumatoid arthritis/traumatic arthritis/early osteoarthritis/spondylitis/fibrositis/myositis/bursitis/tenosynovitis.

Formula:

Orphenadrine HCl	15 mg	Proved muscle relaxant to relax spasm
Aluminum Aspirin	375 mg	Fast analgesic relief of motion-stopping pain
Dexamethasone*	0.15 mg	Low-dosage anti-inflammatory steroid

For complete details, consult latest Schering literature available from your Schering Representative or Medical Services Department, Schering Corporation, Bloomfield, N. J. **Bibliography:** 1. Ernst, E. M.: Pennsylvania M.J. 63:708 (May) 1960. 2. Settel, E.: Clin. Med. 7:1835 (Sept.) 1960.

*DERONIL® brand of dexamethasone H-415

loosens the rheumatic grip on muscles and joints

brand of antirheumatic preparation

Delenar®

after surgery: vitamins are therapy

Nutritional supplementation is basic to postoperative care. Therapeutic allowances of B and C vitamins help meet increased metabolic requirements and compensate for stress depletion. STRESSCAPS can set the patient on a more favorable course and contribute to full recovery. Packaged in decorative "reminder" jars of 30 and 100.

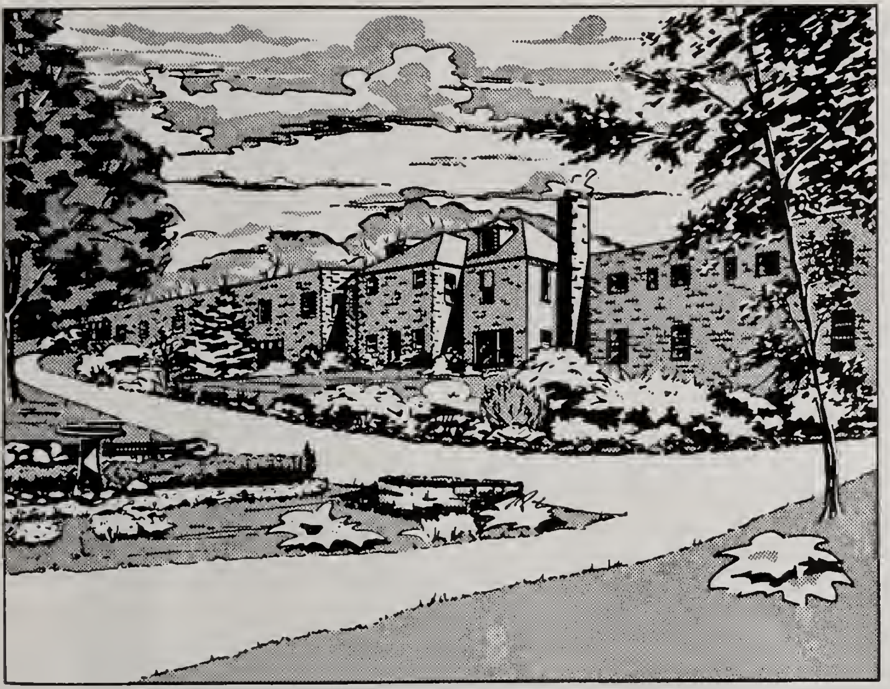
Each capsule contains:	
Vitamin B_1 (Thiamine Mononitrate)	10 mg.
Vitamin B_2 (Riboflavin)	10 mg.
Niacinamide	100 mg.
Vitamin C (Ascorbic Acid)	300 mg.
Vitamin B_6 (Pyridoxine HCl)	2 mg.
Vitamin B_{12} Crystalline	4 mcgm.
Calcium Pantothenate	20 mg.

Recommended intake: Adults, 1 capsule daily, or as directed by physician, for the treatment of vitamin deficiencies.

LEDERLE LABORATORIES, A Division of AMERICAN CYANAMID COMPANY, Pearl River, N. Y. Lederle

STRESSCAPS®

Stress Formula Vitamins Lederle



"All the Comforts of Home" . . .

for

POST OPERATIVE
•
MEDICAL
•
CONVALESCENT
•
DIABETIC
•
PARALYTIC
•
INVALID
•
AGED
•
CHRONIC
•
AMBULATORY
•
RETIRED GUESTS, ETC.

★ A MEDICAL INSTITUTION UNDER THE SUPERVISION OF REGISTERED NURSES ★
LICENSED BY STATE AND COUNTY

KENSINGTON GARDENS SANITARIUM

AN ULTRA-MODERN HOME IN THE SUBURBS ON TEN ACRES
WITH A COUNTRY ATMOSPHERE

3000 McComas Avenue
Kensington, Maryland

MEMBER OF

CARE OF THE AGED

AMERICAN NURSING HOME ASSOCIATION

MEMBER
AND MARYLAND NURSING HOME ASSOCIATION

- Rehabilitation Facilities
- Private and Semi-Private Rooms with Connecting Baths
- Beautifully Decorated
- Television in Spacious Lounges
- Large Porches
- Lovely Lawns and Shade Trees
- Supervised Diets
- Patients May Retain Their Own Physician
- 24-Hour Nursing Care
- Reasonable Rates
- Recreation and Physical Therapy

For Further Information Phone

LOckwood 5-2291 or LOckwood 5-0872

Proprietors-Administrators

LILLIAN H. and GEORGE L. BRICKER

Especially useful in chronic pain, Darvon® Compound-65 effectively relieves inflammation and pain . . . does not cause addiction or tolerance (. . . and Darvon Compound-65 doesn't require a narcotic prescription). Each Pulvule® Darvon Compound-65 provides 65 mg. Darvon®, 162 mg. acetophenetidin, 227 mg. A. S. A.®, and 32.4 mg. caffeine. Usual dosage is 1 Pulvule three or four times daily. This is a reminder advertisement. For adequate information for use, please consult manufacturer's literature. Eli Lilly and Company, Indianapolis 6, Indiana.

DARVON® COMPOUND-65 Lilly

Darvon® Compound (dextro propoxyphene and acetylsalicylic acid compound, Lilly); Darvon® (dextro propoxyphene hydrochloride, Lilly) (α-d-4-dimethylamino-1,2-diphenyl-3-methyl-2-propionoxybutane hydrochloride); A.S.A.® (acetylsalicylic acid, Lilly) 220212

When you choose an anorectic—

"Does it help the patient maintain the proper diet, is it free of dangerous side effects, and does the patient like it?"[1]

Perhaps you'll find, as Stevenson did, "['Eskatrol'] seems to meet these criteria better than most."

1. Stevenson, L.E.: M. Ann. District of Columbia *30*:409 (July) 1961.

ESKATROL®
SPANSULE®
brand of sustained release capsules

PRESCRIBING INFORMATION

Formula: Each 'Eskatrol' *Spansule* sustained release capsule contains Dexedrine® (brand of dextro amphetamine sulfate), 15 mg., and Compazine® (brand of prochlorperazine), 7.5 mg., as the dimaleate.

Recommended Dosage: One 'Eskatrol' *Spansule* capsule daily, taken in the morning.

Side Effects: Side effects (chiefly nervousness and insomnia) are infrequent, and usually mild and transitory.

Cautions: Clinical experience has demonstrated that 'Eskatrol' (containing the phenothiazine derivative, prochlorperazine) has a wide margin of safety and that there is little likelihood of blood or liver toxicity or neuromuscular reactions (extrapyramidal symptoms). The physician should be aware, however, of their possible occurrence.

'Eskatrol' *Spansule* capsules should be used with caution in the presence of severe hypertension, advanced cardiovascular disease, or extreme excitability.

Prescribing information adopted Jan. 1961

Smith Kline & French Laboratories

In
intestinal
"grippe"

prompt
4 way
check of
diarrhea

- ✓ Curbs excessive peristalsis
- ✓ Adsorbs toxins and gases
- ✓ Soothes inflamed mucosa
- ✓ Provides intestinal antisepsis

POMALIN

TRADEMARK

Liquid

EFFECTIVE ANTIDIARRHEAL

FORMULA: *Each 15 cc. (tablespoon) contains:*

Sulfaguanidine U.S.P....	2 Gm.
Pectin N.F....................	225 mg.
Kaolin	3 Gm.
Opium tincture U.S.P. ...	0.08 cc.

(equivalent to 2 cc. paregoric)

DOSAGE: Adults: Initially 1 or 2 tablespoons from four to six times daily, or 1 or 2 teaspoons after each loose bowel movement; reduce dosage as diarrhea subsides.

Children: ½ teaspoon (=2.5 cc.) per 15 lb. of body weight every four hours day and night until stools are reduced to five daily, then every eight hours for three days.

SUPPLIED: *Bottles of 16 fl. oz. (raspberry flavor, pink color)*
Exempt Narcotic. Available on Prescription Only.

Winthrop
LABORATORIES
New York 18, N. Y.

Before prescribing be sure to consult Winthrop's literature for additional information about dosage, possible side effects and contraindications.

RELIEVE THE COLD
SUPPRESS THE COUGH
WITH NEW

'EMPRAZIL-C'
TABLETS

ANTITUSSIVE ■ DECONGESTANT ■ ANALGESIC

Each tablet contains:

Codeine Phosphate*	15 mg.
'Sudafed'® brand Pseudoephedrine Hydrochloride	20 mg.
'Perazil'® brand Chlorcyclizine Hydrochloride	15 mg.
Acetophenetidin	150 mg.
Aspirin (Acetylsalicylic Acid)	200 mg.
Caffeine	30 mg.

*Warning—may be habit forming.

Complete literature available on request.

Also available without codeine as
'EMPRAZIL'®
TABLETS

BURROUGHS WELLCOME & CO. (U.S.A.) INC., TUCKAHOE, N. Y.

THE MEDICAL ANNALS OF THE DISTRICT OF COLUMBIA is published by the Medical Society of the District of Columbia for the promulgation of information of scientific, general medical and personal interest.

Manuscripts for publication, news items, books for review, and correspondence relating to the editorial management should be sent to Dr. Wallace M. Yater, editor, Medical Annals of the District of Columbia, 1718 M Street, N.W., Washington 6, D. C.

Articles are accepted for publication on condition that they are contributed solely to this journal. Manuscripts must be typewritten, double spaced, and the original copy submitted. Photographs and drawings for illustrations must be carefully marked and show clearly what is intended. Medical Annals will bear the cost of printing two cuts accompanying manuscripts submitted for publication. The cost of printing more than 2 cuts must be borne by the author.

Bibliographies should include the name of author (last name and initials), exact title of article, name of periodical, with volume, page, month (day of month in weekly), and year. References should be numbered consecutively in the order in which they appear in the text.

Matter appearing in the Annals is covered by copyright but, as a rule, no objection will be made to its reproduction in reputable medical journals, if proper credit is given. However, the reproduction for commercial purposes of articles appearing in the Medical Annals of the District of Columbia will not be permitted.

Reprints may be obtained at cost.

The Medical Annals of the District of Columbia is published monthly. Subscription is included in the annual dues of members. To non-members the annual subscription price is: Domestic $4.50; Canadian, $5.00; foreign $5.50, including postage; single copies, fifty cents.

Checks, etc. should be made payable to the Medical Society of the District of Columbia.

In the Chevy Chase Area
FOR THE BEST IN DRUGS AND SERVICE
IT'S
HIGGER'S
Complete Biological Stocks
Marcelle Hypo Allergenic Toiletries

HIGGER'S DRUGS, INC.
5015-17 Connecticut Avenue
Phone: Woodley 6-1815

PHYSICIAN SUPPLIES
ANATOMICAL SUPPORTS
HOSPITAL EQUIPMENT
Instruments
Blood Chemistry Reagents
Disposable Products
Anatomical Supports—Stockings
Wheel Chairs—Hospital Beds
Office Equipment—Colostomy Supplies
Call ASSCO for Fast Delivery
ACCREDITED SURGICAL SALES
3226 Wisconsin Ave., N.W. EM 3-9595
Washington, D. C.

"We Make Business Possible"
MALLOREY OFFICE SUPPLY COMPANY
Commerical Stationers
Printing
Office Supplies • Engraving • Office Furniture
732 9th Street, N.W.
Washington 1, D. C.
Republic 7-0414

1942 . . . NINETEENTH ANNIVERSARY . . . 1962
PROFESSIONAL BUSINESS MANAGEMENT, INC.
John C. Post, *President*
A Personal Service Designed to Assist the Doctor with the Business Side of Medical Practice.
• *Medical Management Specialists* •
1000 20th Street, N.W. Tel. FEderal 8-3200

MAXWELL
AND
TENNYSON
PHARMACISTS

"Where Pharmacy is a Profession"

M+T

Washington, D. C.

1801 Eye Street NAtional 8-0206
1835 Eye Street REpublic 7-4600
1726 Eye Street 298-6510

Prescription called for and delivered without extra charge

Exclusive Distributor
Marcelle Cosmetics*
HYPO-ALLERGENIC
Chicago, Illinois

*Accepted for advertising in publications of the American Medical Association.

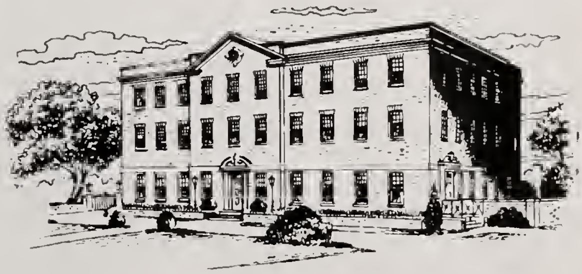
NURSES REGISTRY

EXPERIENCED UNDERGRADUATES
& PRACTICAL NURSES

Recommended by Physicians
At Your Service for Day or Night Duty
In Washington and nearby area

CALL—RAndolph 6-6706
(A non-profit organization)

PART-TIME MEDICAL SPECIALISTS—Board-eligible or certified, to develop and provide authoritative medical opinions regarding drug products. Salary to $6,847. Private practice permitted. Membership and participation in professional organizations encouraged. Liberal benefits of Federal Civil Service including life insurance, health benefits, and excellent sick, vacation, and retirement benefits; 5-day, 20-hour week. Send complete curriculum vitae to: Ralph G. Smith, M.D., Acting Medical Director, Food and Drug Administration, Washington 25, D.C.



The Dignity and Tradition of a Gawler Funeral Cost No More Than Ordinary Services

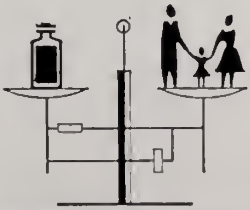
JOSEPH
GAWLER'S
SONS, INC.

FUNERAL DIRECTORS

Wisconsin Ave. and Harrison St. N.W.

Private parking on our premises for over 100 cars

THE BLOOD SERVICE PLAN
of the
Metropolitan Washington Blood Banks, Inc.
(Not for Profit)



The Blood Service Plan operates to supply or replace all the blood and plasma needed by a member who requires transfusions. Each member is guaranteed protection for **unlimited** blood replacement anywhere in the United States for the duration of the membership period.

For information telephone 347-2220

Suite 500–915 Nineteenth Street, N.W.

T. A. Loosbrock, Executive Director

BOOKS RECEIVED

Acknowledgment is made of the following books which have recently been received.

Cancer: Diagnosis, Treatment, and Prognosis' 3rd ed. Lauren V. Ackerman, M.D., and Juan A. del Regato, M.D. Price, $29.50. Pp. 1296, with 779 text illustrations and 4 color reproductions. St. Louis: Mosby, 1962.

Bray's Clinical Laboratory Methods, 6th ed. Revised by John D. Bauer, M.D., Gelson Toro, Ph.D., and Phillip G. Ackermann, Ph.D. Price, $10.50. Pp. 594, with 142 illustrations and 16 color plates. St. Louis: Mosby, 1962.

Correlative Neuroanatomy and Functional Neurology, 11th ed. Joseph G. Chusid, M.D., and Joseph J. McDonald, M.D. Price, paper, $5.50. Pp. 384, illustrated. Los Altos, Calif.: Lange Med. Publ., 1962.

Malpractice Law Dissected for Quick Grasping. Charles L. Cusumano. Price, $10.00. Pp. 132. New York: Medicine-Law Press, 1962.

Todd-Sanford Clinical Diagnosis by Laboratory Methods, 13th ed. Edited by Israel Davidsohn, M.D., F.A.C.P., and Benjamin B. Wells, M.D., Ph.D., F.A.C.P. Price, $16.50. Pp. 1020, illustrated. Philadelphia: Saunders, 1962.

Age-Grouping Methods in Diptera of Medical Importance with Special Reference to Some Vectors of Malaria. T. S. Detinova. Price, paper, $5.25. Pp. 216, illustrated. Geneva: World Health Organization, 1962.

Synopsis of Neurology, Francis M. Forster, B.S., M.D. Price, $6.75. Pp. 223. St. Louis: Mosby, 1962.

Handbook of Psychiatric Treatment in Medical Practice. Nathan S. Kline, M.D., F.A.C.P., and Heinz Lehmann, M.D. Price, $3.50. Pp. 124. Philadelphia: Saunders, 1962.

Narcotics and Narcotic Addiction, 2nd ed. David W. Maurer, Ph.D., and Victor H. Vogel, M.P.H., M.D. Price, $9.00. Pp. 339, with 23 illustrations. Springfield, Ill.: Thomas, 1962.

Novak's Gynecologic and Obstetric Pathology with Clinical and Endocrine Relations, 5th ed. Edmund R. Novak, A.B., M.D., and J. Donald Woodruff, B.S., M.D. Price, $16.00. Pp. 713, with 761 illustrations, 31 in color. Philadelphia: Saunders, 1962.

Ciba Foundation Study Group No. 12. Curare and Curare-like Agents. A.V.S. de Reuck, M.Sc., D.I.C., A.R.C.S., Editor for the Ciba Foundation. Price, $2.95. Pp. 103, with 26 illustrations. Boston: Little, 1962.

Ciba Foundation Symposium on the Exocrine Pancreas, Normal and Abnormal Functions. A.V.S. de Reuck, M.Sc., D.I.C., A.R.C.S., and Margaret P. Cameron, M.A., Editors for the Ciba Foundation. Price, $11.50. Pp. 390, with 91 illustrations. Boston: Little, 1962.

KALORAMA
CONVALESCENT
HOME, INC.

Licensed by the D. C. Department of Licenses and Inspections

INSTITUTIONAL CARE
for the medical management of
the acute stages of alcoholism.

2001 KALORAMA ROAD
at 20th Street, N.W. Decatur 2-2681

THE GIBSON COMPANY

57 years serving the medical profession

Medical and Surgical Supplies
Hospital, Invalid and Sickroom Supplies
Physiotherapy Equipment
Surgical Fitting Specialists
Expert Medical Equipment Repair Service

1908 K Street, N.W. Federal 8-2688

Surgical Supplies and Equipment

Complete Fitting Service for
Ladies and Men

NELSON KLOMAN SURGICAL SUPPLY CO.
1018 - 18th Street, N.W
Washington 6, D. C.

Telephone: FEderal 8-5245

Visit Us in Our
New Showrooms and Warehouse
7815 Woodmont Avenue
Bethesda, Maryland
New Telephone Number
656-2000
BETH-MONT SURGICAL SUPPLY CO.

BEUCHLER'S
915-19th Street, N.W. Republic 7-6006

THE LAUREL SANITARIUM LAUREL, MARYLAND

Geriatric
Hospital
Buildings in centre
of 122 acres.
ESTABLISHED 1905

Accommodations
available for
senile ambulatory
women who need
psychiatric care.

LICENSED FOR TREATMENT OF NERVOUS AND MENTAL DISEASES
Phone Parkway 5-1250—Jesse C. Coggins, M.D.—Medical Director

Westbrook
Sanatorium
RICHMOND, VIRGINIA

50th Anniversary
1911 - 1961

REX BLANKINSHIP, M.D.
President
JOHN R. SAUNDERS, M.D.
Medical Director
THOMAS F. COATES, JR., M.D.
Assistant Medical Director
JAMES K. HALL, JR., M.D.
Associate
R. H. CRYTZER
Administrator

A private psychiatric hospital employing modern diagnostic and treatment procedures—electro shock, insulin, psychotherapy, occupational and recreational therapy—for nervous and mental disorders and problems of addiction.

Brochure of Literature and Views Sent On Request
P. O. Box 1514 Phone EL 9-5701

CLASSIFIED ADVERTISEMENTS

Advertisements under the following headings are charged at the rate of $5.00 for one insertion of 50 words or less; $4.00 each for three insertions; and $3.00 each for six insertions or more. All advertisements are payable in advance; the Editorial Board reserves the right to edit copy. Closing date for new copy, 20th of month preceding date of issue.

Classified advertisements of a professional nature are free to members.

SITUATIONS WANTED

GENERAL PRACTITIONER, age 37, desires to associate with other GP in D.C. on associate or partnership basis. Available immediately. Address Box 3, 1718 M Street, N.W. (6).

GENERAL SURGEON, Board-eligible, licensed in D. C., would like to affiliate full or part-time in partnership or with group or clinic. Will furnish full qualifications upon request. Address Box 80, 1718 M Street, N.W. (6)

PHYSICIANS WANTED

INTERNIST, individual office, next to established internist. Cover each other's practice. Possibility of partnership. Address Box 15, 1718 M Street, N.W. (6)

SURGEON, with interest in industrial surgery, to associate full-time with general surgeon. View toward partnership. Address Box 26, 1718 M Street, N.W. (6)

ARMY MEDICAL RESERVE OFFICER: An attractive assignment in a high level unit is available for young medical officer who wishes to stay in the Reserve or who has some service obligation. Address Box 37, 1718 M Street, N.W. (6)

PEDIATRICIAN to join medical group full-time. Good salary plus yearly increases. Address Box 46, 1718 M Street, N.W. (6)

APPROVED MEDICAL RESIDENCY PROGRAM: Applicants may apply to Administrator, The Alexandria Hospital, Alexandria, Va.

OTOLARYNGOLOGIST for active ENT practice and two fully equipped office locations, D. C. and Wheaton area. Available as unit or separately. Any reasonable terms for transfer will be considered. Telephone Hudson 3-4600.

PRACTICE FOR SALE

GENERAL PRACTICE in California, for sale, association, or percentage basis. Huntington Beach (just south of Long Beach) out of smog. Beach 4 miles away. Practice grosses $5,975 monthly. Will accept cash for equipment and percentage of collectibles. Will introduce. Richard L. Siggers, M.D., G.W.U. 1949, 13861 Beach Blvd., Westminster, Calif.

ANCILLARY SERVICES AVAILABLE

MEDICAL TECHNOLOGIST, M.T., A.S.C.P., desires part-time work in Northwest Section. Qualified for general laboratory testing, particularly serology. About 10 to 12 hours on two days per week preferred. Willing to help with patients if required. Telephone North 7-0149.

REAL ESTATE

FOR SALE OR RENT, with option to buy: House on Belair-corner property, near Maryland Routes 450 and 301. Two-story Colonial, almost new, with 4 bedrooms, 1½ baths; fully equipped kitchen with dishwasher; clothes washer and dryer; storm windows and doors. Fully air-conditioned. Ideal location. Telephone Union 4-2325 9 a.m. to 8 p.m.

FOR SALE: Wheaton: Doctor's home-office and equipment. Rambler with 3 bedrooms, living room, dining room, kitchen, bath. Office with reception room, 3 treatment rooms, bath, 4 examining tables, treatment table, ENT equipment, diathermy, infrared, sofas, chairs, etc. Two separate heating systems. Excellent practice. Forced to sell. Price, $21,000. Telephone Emerson 3-6125.

FOR SALE OR RENT: Ideal house-office for doctor and family: centrally air-conditioned rambler with 4 bedrooms and full basement; front and back porches; beautiful, fenced yard and shrubs. Located on University Blvd. between Langley Park and Four Corners, Md. Telephone Juniper 8-8700.

OFFICE SPACE AVAILABLE

FOR RENT: New Medical Building, 1726 Eye Street, N.W.; one large suite, 1400 sq. ft., or may be subdivided. All utilities furnished including switchboard service. Central air-conditioning. Parking available. Telephone 298-6936.

FOR RENT: First floor offices, air-conditioned, at 1830 K Street, N.W., consisting of consulting room, 3 examining rooms, reception room, with or without furniture, secretarial area, lavatory. Rental, $150. Telephone 296-4500.

FOR RENT: Vienna, Va.: Two-year-old building in new block designated for office buildings. First and second floor locations. Ample parking. Vienna's newest and largest dental suite now in building. Square footage flexible. Attractive lease. Telephone Mr. Copp, Dunkirk 5-9000 day or Dunkirk 5-9078 evening.

"Cappy"

INTRODUCES THE WASHINGTON AREA SPECIALISTS *in collections for Professionals*

I'M
"Cappy"
an Old Fashioned girl with MODERN ideas about bill collecting

Unless We Collect, There Is No Charge

We offer a complete collection service to bring about prompt payments in a dignified, diplomatic manner for those lacking adequate facilities for enforced collections.

'PHONE 882-2000

CAPITAL CREDIT CORP.

7600 GEORGIA AVENUE, N.W. WASHINGTON 12, D.C.

Classified Advertisements (*Continued*)

TO SHARE: Furnished office with pediatrician; 700 sq. ft. in air-conditioned medical building in Silver Spring. Telephone Juniper 7-6777.

FOR RENT: Medical offices, 200 sq. ft., in Spring Professional Building, 1110 Spring Street, Silver Spring, Md. $75 per month. Telephone Juniper 8-7683.

FOR RENT: The Park Maple, 7777 Maple Avenue, Takoma Park, Md., within 1½ blocks of Washington Sanitarium. Only $4 per foot in this attractive new building. March 1 occupancy. Telephone Mr. Llewellyn, Shannon & Luchs, National 8-2345.

TO SHARE: With specialist, completely equipped office with new X-ray machine, physiotherapy apparatus. Answering service. Very moderate rental. New building, completely air-conditioned, 1616 18th Street, N.W., Apt. 104; telephone 232-0800.

FOR RENT, SHARE OR SUBLEASE: Doctor's offices in fashionable apartment building in Northwest Washington. Presently occupied by internist and OB-GYN. Ideal for surgical specialty or GP. Address Box 48, 1718 M Street, N.W. (6)

FOR RENT: Office suite at 1625 Massachusetts Avenue, N.W.: reception room, 2 private offices, 2 treatment rooms, approximately 950 sq. ft.; air-conditioned. One parking space. Reasonable rental. Telephone Hobart 2-4700 or Randolph 6-1644.

TO SHARE: Offices in Silver Spring in new medical building on Spring Street. Fully furnished and equipped. Full-time nurse. Telephone 588-4820.

EQUIPMENT FOR SALE

ULTRASONIC MACHINE, Fischer; 10 mm. quartz crystal, 30 watt output, angulated transducer head. Practically new, perfect condition. Bargain at $250. Telephone 232-0800.

DOCTORS' ELECTRIC SIGNS (2) with fluorescent lights: 1 single-faced to be put in window or attached to wall; other double-faced and attached to attractive black pole. In excellent condition. Purchaser has only to change stencil. Telephone Juniper 8-8700.

BMR MACHINE, Model M Basal Meter, Liebel-Flarsheim; self-calculating basal metabolism apparatus; used very little. Telephone Sterling 3-4482.

MEDICAL OFFICERS—Training and experience in clinical pharmacology, to develop and provide authoritative medical opinions and evaluations regarding drugs. Salary to $13,695. Limited private practice permitted. Membership and participation in professional organizations encouraged. Liberal benefits of Federal Civil Service including life insurance, health benefits, and excellent sick, vacation, and retirement benefits; 5-day, 40-hour week. Cost of travel and transportation of household furnishings to Washington, D.C., will be paid. Send complete curriculum vitae to: Ralph G. Smith, M.D., Acting Medical Director, Food and Drug Administration, Washington 25, D.C.

WILLSTON
MEDICAL CENTER
Arlington Blvd. & Patrick Henry Dr.
(Opposite Seven Corners)

An Established Location
for 10 Years

7000 Square Feet of Office Space

All Facilities Installed-Air conditioned
FREE PARKING

WILL RENT TO GROUP OR INDIVIDUAL

CALL JE 3-2000

MEDICAL SPECIALISTS—Board-eligible or certified, to develop and provide authoritative medical opinions regarding drug products. Salary to $13,695. Limited private practice permitted. Membership and participation in professional organizations encouraged. Liberal benefits of Federal Civil Service including life insurance, health benefits, and excellent sick, vacation, and retirement benefits; 5-day, 40-hour week. Cost of travel and transportation of household furnishings to Washington, D.C., will be paid. Send complete curriculum vitae to: Ralph G. Smith, M.D., Acting Medical Director, Food and Drug Administration, Washington 25, D.C.

"Registered Nurses—For Private Duty"
U. S. EMPLOYMENT SERVICE
Professional Office
GRADUATE NURSES REGISTRY
1000 16th Street, N.W.
Washington 6, D. C.

CALL—DISTRICT 7-1129

24-hour telephone service—
7 days a week

NEW!

Around the clock relief for DISTRESS OF COLDS

ISOCLOR® TIMESULE®

A NEW COMPREHENSIVE RELIEF

- **Relief usually starts in minutes**—to open nasal passages, stop running nose and eyes, sneezing, wheezing, itching and post-nasal drip
- **Relief usually lasts up to 12 hours** with a single oral dose
- **Gives both** upper respiratory decongestion and bronchodilatation to relieve chest discomfort
- **With minimal** drowsiness, CNS or pressor stimulation

Isoclor Timesule,
actual size

MADE POSSIBLE BY THE NEW TIMESULE RELEASE MECHANISM

Schematic
drawing of
Timesule cell
showing dialysis,
rough permeable
coating.

ALSO AVAILABLE:
ISOCLOR TABLETS
AND LIQUID.

Release with the Isoclor Timesule is at a relatively even, constant rate, independent of gastrointestinal motility, pH, or enzymatic activity. Each Timesule pellet is actually a micro dialysis cell, consisting of a drug core with coating of dialyzing membrane of precisely controlled permeability. Approximately 20% of active drugs are released within one hour and 80% in 8 hours. Peaks and valleys of over-release and under-release are minimized for constant, controlled relief with minimum side effects.

EACH ISOCLOR TIMESULE CONTAINS:
Chlorpheniramine maleate ...... 10 mg.
d-Isoephedrine HCl .... 65 mg.
In a special form providing prolonged therapeutic effect.

DOSE: Adults: One Timesule every 12 hours, or as directed.

WARNING: Use with caution in patients suffering from hypertension, cardiac disease, hyperthyroidism or diabetes. Patients susceptible to the soporific effect of chlorpheniramine should be warned against driving or operating machinery should drowsiness occur.

CHARLES C. HASKELL & COMPANY
Richmond, Virginia
DIV. ARNAR-STONE LABORATORIES, INC.

INDEX OF ADVERTISERS

Page

Bank

Riggs National Bank 4

Beverages

Coca-Cola Company 14

Blood Service

Metropolitan Washington Blood Banks, Inc. 59

Books

W. B. Saunders Company 27

Business Counseling

Professional Business Management, Inc. 58

Collection Agencies

Capital Credit Corporation 62
Credit Bureau, Inc. 5

Diagnostic Equipment

Sanborn Company 42

Dietetic Products

Dairy Council of Greater Metropolitan Washington, D. C. 9
J. H. Filbert, Inc. 48
Florida Citrus Commission 12
Jackson-Mitchell Pharmaceuticals, Inc. 43

Funeral Homes

Joseph Gawler's Sons, Inc. 59
S. H. Hines & Company 23

Insurance

Mutual of Omaha 3-C
Russell, Marsh & Kennedy, Inc. 14
St. Paul Fire & Marine Insurance Company 40

Nurse Registries

Association of Undergraduate and Practical Nurse Registry 59
Capital Nurse Registry 30
U. S. Employment Service for D. C. 63

Office Furniture and Supplies

W. D. Campbell Company 6
Mallorey Office Supply Company 58

Office Space

Willston Medical Center 63

Page

Pharmaceuticals

Abbott Laboratories 24–25, 36–37
Ames Company 13
Bristol Laboratories 20–21
The Brown Pharmaceutical Company 10
Burroughs Wellcome and Company 32, 57
E. K. Cook & Company, Inc. 10
Davies, Rose & Company 49
Charles C. Haskell & Company 64
Knoll Pharmaceuticals 41
Lederle Laboratories 16–17, 52
Thomas Leeming & Company, Inc. 38
Eli Lilly & Company 34, 54
Parke, Davis & Company 2-C, 3
Physicians Products Company 15
Wm. P. Poythress & Company 29
A. H. Robins Company 19
Roche Laboratories 4-C
J. B. Roerig & Company 7
Sardeau, Inc. 66
Schering Corporation 33, 51
G. D. Searle & Company 35
Smith, Kline & French Laboratories 55
Upjohn Company 8, 44-45
Wallace Laboratories 11, 39, 47
Winthrop Laboratories 22, 31, 50, 56

Pharmacies

Higger's Drugs 58
Maxwell & Tennyson 59
Peoples Drug Store 46

Physicians Wanted

Food and Drug Administration 59, 63

Sanitariums

Kalorama Convalescent Home 60
Kensington Gardens Sanitarium 53
Laurel Sanitarium 61
Westbrook Sanatorium 61

Surgical Supplies

Accredited Surgical Sales 58
Beth-Mont Surgical Supply Company 61
Beuchler's, Inc. 61
Birtcher Medical Distributors of D. C. 30
Gibson Company 60
Nelson Kloman Surgical Supply Company 60

Why **Sardo®**

is the

BATH OIL

OF CHOICE

for dry,

itchy skin

Why does SARDO so effectively relieve[1-5] dryness and itching in so many patients with eczematoid dermatitis, atopic dermatitis, senile pruritus, contact dermatitis, soap dermatitis, diabetic dry skin, neurodermatitis?

These are the reasons...

HIGH QUALITY SARDO is the **original, exclusive,** high quality water-dispersible bath additive oil.*

IMMEDIATE DISPERSIBILITY
SARDO promptly disperses millions of microfine globules uniformly throughout the bath water; no unsightly oil slicks as with certain other bath additives.

SUPERIOR ADSORBABILITY SARDO covers the skin with a fine, unobtrusive long-clinging oil film . . . which lubricates, softens, prevents excessive moisture evaporation and so helps to replenish natural oil and moisture.

ECONOMICAL In addition, the cost per application of SARDO is low—for only **one** capful per bath is required for therapeutic effect.

PLEASANT Unique pine scent, non-sticky, non-sensitizing, SARDO assures patient cooperation.

SARDO consists of oils and various esters of specially selected organic acids having a chain length of C-14 and 16 in combination with non-irritating wetting agents to provide colloidal dispersion of the lipophilic phase. Fragrance consists of natural essential oils, isolates, and aromatics.

FOR SAMPLES AND LITERATURE

please write... **SARDEAU,** INC. 75 East 55th Street, New York 22, N. Y.

Also available: SARDOETTES, disposable compresses impregnated with SARDO, for topical application in relieving skin dryness, itching, scaliness in the same conditions as listed for SARDO.

1. Borota, A., and Grinell, R. N.: J. Amer. Geriatrics Soc., 10:413, 1962. 2. Spoor, H. J.: N. Y. State J. M., 58:3292, 1958. 3. Lubowe, I. I.: Western Med., 1:45, 1960. 4. Weissberg, G.: Clin. Med., 7:1161, 1960. 5. Lieberman, W.: Amer. J. Proctology, 12:374, 1961.

*Pat. Pend. T.M. © 1962 by Sardeau, Inc.

IMPORTANT ANNOUNCEMENT

NOW -- A NEW PLAN OF INCOME PROTECTION INSURANCE DESIGNED TO SUPPLEMENT YOUR OFFICIAL D.C. MEDICAL SOCIETY PLAN.

OUTSTANDING FEATURES:

- ✓ LIFETIME BENEFITS FOR ACCIDENTS.
- ✓ UP TO AGE 65 FOR SICKNESS.
- ✓ SICKNESS BENEFITS DOUBLE AFTER 5 YEARS OF DISABILITY UP TO AGE 65.

Available only to members now carrying the Basic Plan, Policy Form LMN.

For additional details write or call:

Joseph E. Jones
1666 Connecticut Avenue
Washington 9, D. C.

—

483 - 9005

Mutual
OF OMAHA
INSURANCE COMPANY

specific
for anxiety
& tension

Librium

The singular specificity of Librium in controlling anxiety and tension has proven to be an advantage in a wide range of disorders characterized by anxiety of varying degrees. Notably effective in patients whose symptoms are primarily emotional, Librium is equally valuable when organic disease is aggravated or prolonged by accompanying anxiety. Coupled with its effectiveness is an outstanding record of safety. Librium has few, if any, of the unwanted side effects associated with tranquilizers and daytime sedatives—no extrapyramidal effects, no autonomic blocking, and no dulling of mental alertness. Consult literature and dosage information, available on request, before prescribing.

the successor to the tranquilizers

LIBRIUM® Hydrochloride—7-chloro-2-methylamino-5-phenyl-3H-1,4-benzodiazepine 4-oxide hydrochloride

ROCHE

ROCHE

Date Due

13 APR '64 HML			

Demco 293-5